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EFFECTIVE DATE (E-DATE) MODEL DOCUMENTATION VOLUME 4

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PROGRAM MAINTENANCE MANUAL(U) TECHNASSOCIATES INC

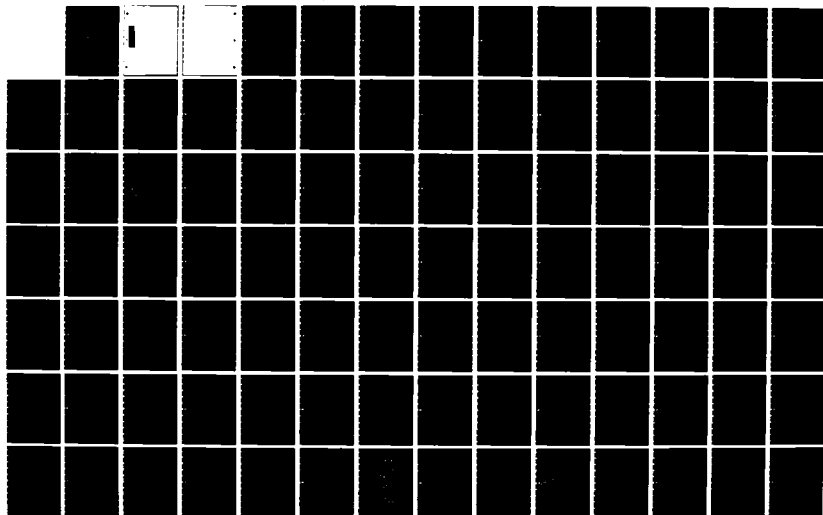
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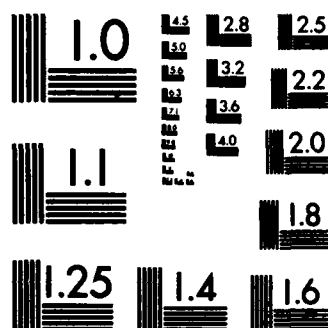
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A set of documentation has been developed for the Effective Date (E-DATE) Model following DOD documentation standards (DOD 7935.1-S). Four types of documentation were generated as follows: A functional description, a users' manual, a computer operation manual, and a program maintenance manual (including system/subscription and program specifications into a single volume). The remaining documentation types described in the DOD standards were not considered applicable. → to p. 1-1		

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EFFECTIVE DATE (D-DATE) MODEL DOCUMENTATION

Volume IV - Program Maintenance Manual.

(Add) NOTE: The term Consolidated Change Table (CCT) has been replaced with the term Consolidated TOE Update (CTU). Since CCT was still utilized during model program development, it will appear in some file names and reports.

<u>Page</u>	<u>Para.</u>	
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1-1	1.3	Add: "CTU The Consolidated TOE Update".
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FOREWORD

This documentation of the E-DATE Model was prepared under contract to the Concepts Analysis Agency (CAA) by Technassociates, Inc. of Rockville, Maryland. As provided for in the contract, four volumes of documentation were produced to DOD Automated Data Systems Documentation Standards (DOD 7935.1-S).

The requirements for the documentation were established by coordination among CAA, as model developer; the Logistics Evaluation Agency (LEA), as designated operator and maintainer of the model; and the Directorate for Plans and Operations, ODCSLOG as proponent for and user of the model.

The documentation effort was carried out concurrently with the initial delivery and operation of the model. The Operating Procedures, in particular, are in preliminary form, and may require update as operating familiarity with the model is achieved.

Additional functional capabilities of the model will be reflected in updates to the documentation as these capabilities are implemented.

The documentation was prepared on an NBI Word Processing System 3000 (Level G). This system is compatible with the word processing facility at LEA. Distribution of the documentation by CAA has included transmittal of diskette copies of each volume to LEA for update purposes. A copy of each of these diskettes is also being permanently retained by the word processing firm, Automated Words of Rockville, Maryland, who prepared the original typescript under sub-contract.

PROGRAM MAINTENANCE MANUAL
VOLUME IV

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SECTION 1. GENERAL DESCRIPTION

1.1 Purpose of Program Maintenance Manual

The objective of the Program Maintenance Manual for the Effective Date Model (E-DATE) is to provide the maintenance programmer with the information necessary to effectively maintain the system.

1.2 Project References

- a. User's Manual for the Effective Date Model.
- b. Operations Manual for the Effective Date Model.
- c. Functional Description for the Effective Date Model.
- d. AR 220-1, Unit Status Reporting, 1 June 81.
- e. Headquarters, Depot System Command, Total Army Equipment Distribution Program, User's Manual, October 1981.

1.3 Terms and Abbreviations

The following listing provides an explanation of any terms or acronyms subject to interpretation by the reader of this document.

ALO	Authorized Level of Organization.
A-RECORD	The TAEDP record containing unit data.
B-RECORD	The TAEDP record containing requirement data.
CCT	The Consolidated Change Table.
CTLLVL	Control Level (Unit Identifier).
C-RECORD	The TAEDP record containing assets data.
DAMPL	Department of Army Master Priority List.
E-DATE	The Effective Date Model.
ERC	Equipment Readiness Code.
FY	Fiscal Year.
LIN	Line Item Number.

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MACOM	Major Command.
MTOE	Modified Table of Organization and Equipment.
POM	Program Objectives Memorandum.
SRC	Standard Requirements Code.
TAEDP	The Total Army Equipment Distribution Program System.
T-RECORD	The TAEDP record containing equipment change data.
UIC	Unit Identification Code.

SECTION 2. SYSTEM APPLICATION

2.1 System Description

The E-DATE Model is a decision support system for the logistics staff officer which permits the examination of two critical logistics issues: the logistic readiness of Army units, and the redistribution of unit equipment, so as to improve the readiness of selected units (albeit at the expense of degraded readiness of other units). The E-DATE Model provides information to logistics staff officers on the equipment readiness of units based on (TAEDP) projected equipment fills. With this information, the officer can form a judgment as to the adequacy of the fill with respect to the capacity of an individual unit to carry out its mission and the capacity of groups of activated units to contribute to the force readiness.

The E-DATE Model operates in the planning space of the seven-year budgeting cycle provided by TAEDP, consisting of the budget year, the target year and the five out-years. The E-DATE Model is designed to operate on two distinct sets of data as derived from the TAEDP data tapes. One data set consists of Activated Units, that is, new units brought into existence during the seven-year planning period. The other data set consists of existing units impacted by changes identified in the Consolidated Change Table (CCT).

Note: Subsequent to the development of this model, the term Consolidated Change Table (CCT) has been replaced with the term Consolidated TOE Update (CTU). Since the program code utilizes the term CCT throughout, this manual will retain the original reference of CCT.

The changes adjust the requirements and assets of existing units and the logistic staff officer is concerned with the impact of the changes on unit readiness. The logistics staff officer identifies the data sets of interest, and the E-DATE Model accesses the appropriate data and displays the readiness of the set of units by fiscal year, from the activation year forward to the end of the planning cycle. The readiness information is presented in both summary (unit level) and detailed (equipment level) form.

The model uses the C-Level measure of readiness in two ways. First it computes the readiness of units in accordance with the C-Level definitions and displays the results for each unit for each year of the seven year planning period. Having computed readiness, the model is then prepared to accept a user specification of readiness to control the redistribution of assets in a manner to effect a change in the readiness of units previously

rated. To effect this change, the user must indicate the units whose readiness is to be increased and those units whose readiness may be decreased, to achieve the increased level of readiness. The readiness rating takes into account the pacing items in each unit and generates a single measure for each unit as follows:

- Level C-1 At least 90 percent of the reportable equipment is present at 90 percent of the required quantities and all (100 percent) of the pacing items of equipment are present at 90 percent or greater of the required quantities.
- Level C-2 At least 90 percent of the reportable equipment is present at 80 percent of the required quantities and all (100 percent) of the pacing items of equipment are present at 80 percent or greater of the required quantities.
- Level C-3 At least 90 percent of the reportable equipment is present at 65 percent of the required quantities and all (100 percent) of the pacing items of equipment are present at 65 percent or greater of the required quantities.
- Level C-4 If not rated as above.

The model provides this rating information for each unit activated in the fiscal year indicated by the logistics staff officer for all remaining years in the planning cycle. In addition, the model maintains in permanent storage the detailed results on the rating of the individual equipments on which the overall unit rating is based. This information may either be accessed via terminal or made available in hardcopy form.

The model is implemented as a set of three processors. The first processor, the Tape Processor, retrieves the data on all the activated units in the planning cycle from the Army-wide (TAEDP) source. The second processor, the File Processor, extracts the data for units activated in a particular year and reformats the data for use by the third, the Assessment Processor. The Assessment Processor takes the data, carries out the rating calculations, and displays and stores the rating data. The functions of the individual processors are described in paragraph 2.3, General Description.

2.2 Security and Privacy

All program code and listings are considered UNCLASSIFIED and require no special security considerations.

All output reports will be considered CONFIDENTIAL and should be handled in a manner consistent with the guidelines of your office.

The files utilized by the model have a number coded in position 7 of the name. This position will contain one of the following codes:

- 0 - UNCLASSIFIED
- 2 - CONFIDENTIAL
- 4 - SECRET

The majority of the files utilized by the model will be classified as SECRET.

2.3 General Description

The E-DATE model is divided into three processors which must be run sequentially. Once the Tape Processor is run, the File Processor may be run without a rerun of the Tape Processor. The first two processors prepare the TAEDP data for use by the Assessment Processor. The normal schedule of operation would call for the execution of the Tape Processor whenever new TAEDP or CCT data were received. The File Processor would then be rerun for the appropriate file (i.e., dataset of CCTUNT would be specified if new CCT data had been received). Once these files are created, they should be applicable for all subsequent runs of the Assessment Processor. More information on the sequence of runs will be found in the E-DATE User's Manual and Operations Manual. The interrelationship of the three processes is displayed in the System Flowchart, Figure 2-1.

The initial processor, the Tape Processor, contains one main program and 27 subroutines. The functions of each of these routines is explained in the Program Description, Subsection 2.4. The functions of the Tape Processor are as follows:

- Scans the master list for units activated in the planning cycle period to select units from the TAEDP data base for analysis by the model.
- Alternately, scans the Consolidated Change Table (CCT) for units that will undergo equipment changes during the

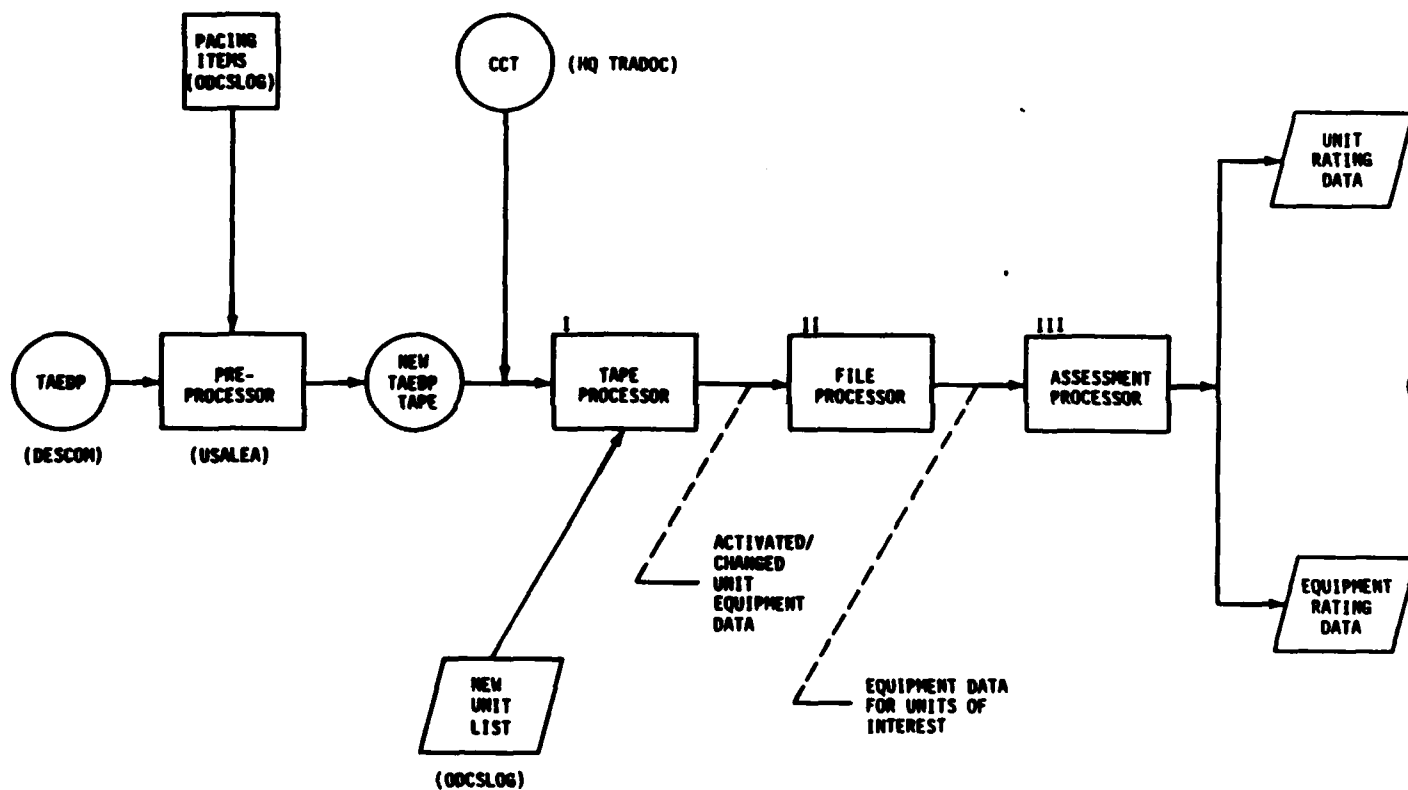


Figure 2-1. System Flow

planning cycle period as a method of TAEDP unit selection.

- Transfers the selected data to separate output files for use in subsequent processing.

The second processor, the File Processor, contains one main program and 23 subroutines. The functions of each of these routines is explained in the Program Description, Subsection 2.5. The functions of the File Processor are as follows:

- Accepts an input specifying the year of activation or the major command of units to be selected for rating.
- Scans the file generated by the Tape Processor for units meeting the selection criteria.
- Groups the units according to unit data (A-record), requirements data (B-record), assets data (C-record) or equipment change data (T-record). These units are also grouped by fiscal year.
- Sorts the data in inverse DAMPL (Department of Army Master Priority List) sequence and creates one large file for the Assessment Processor.
- Provides a summary of all the records processed.

The final processor, the Assessment Processor, contains one main program and 38 subroutines. The functions of each of these routines are explained in the Program Description, Subsection 2.6. The functions of the Assessment Processor are defined as follows:

- Selects the units to be rated through the use of parameters input by the user.
- Calculates the unit readiness based on the unit rating criteria defined in AR 220-1.
- Provides a rating summary depicting the rating of individual units over time and the patterns of ratings of groups of units.
- Provides additional summary reports, including marginal rating summaries, to provide the logistics staff officer with additional information concerning the unit ratings.

- Generates a worksheet to provide the logistics staff officer with a means of specifying those units to be up-rated and those that are acceptable for downrating in a redistribution being considered. These selections are transferred directly into the model.
- Provides a file containing equipment rating data for access by terminal or hardcopy.

The following conventions are utilized throughout Sections 2.4 through 2.6, Program Description, in describing the functions of the routines.

- An asterisk (*) enclosed in parenthesis after a program name will normally represent the FORTRAN capability for processing control. For example, the statement "Call RDRCD (RDFILE, *400, *500)" will cause the program control to pass to label 400 in the calling routine when a "Return 1" is executed in RDRCD. Additionally, the execution of a "Return 2" statement would pass control to label 500. This type of a situation would normally be represented in the Program Description documentation as "Call RDRCD (RDFILE, *, *)." Asterisks will also be used in the "called" routine as well.
- Parenthesis containing variable names or other expressions will represent subscripts if they follow a table name and arguments of a subroutine call if they follow a program or subroutine name.
- Bullets (●) and indentations are utilized in the "Processing" section of each Program Description to designate programming levels. Each margin (indentation) with a bullet starting the line will represent a deeper level of detail in the code.

2.4 Program Description - Tape Processor

Subsection 2.4 will contain a description of the main program for the Tape Processor and the 27 associated subroutines. A complete listing of the programs to be discussed in subsection 2.4 is contained below.

<u>Paragraph Number</u>	<u>Program Name</u>
2.4.1	MAIN
2.4.2	ANYSRC
2.4.3	CCTLST
2.4.4	CHKEQP
2.4.5	CHKLST
2.4.6	CHKSRC
2.4.7	CNTLVL
2.4.8	CNTUFY
2.4.9	DECODE
2.4.10	DSYALL
2.4.11	DSYCTL
2.4.12	DSYCT1
2.4.13	DSYCT2
2.4.14	DSYNW1
2.4.15	DSYNW2
2.4.16	DSYNW3
2.4.17	ENCODE
2.4.18	PAGADV
2.4.19	PIKCCT
2.4.20	PIKNEW
2.4.21	RDRCD
2.4.22	RDUNT
2.4.23	WRCCT
2.4.24	WRHDG
2.4.25	WRNMSG
2.4.26	WRRCD
2.4.27	WRTTL
2.4.28	XLATE

A set of figures and tables is provided to assist the reader in understanding the internal logic of the model. The exhibits begin with a flow diagram of the Tape Processor to provide a general understanding of the system. Other exhibits which follow are meant to provide a more detailed picture of the logic of the individual data elements and routines. A description of the purpose of each exhibit is presented below in the same sequence as the exhibit appears in this subsection.

Figure 2-2. Tape Processor Flow Diagram

It is recommended that the flow diagram be used as the starting point for the first time reader in understanding the logic of this processor. An attempt has been made to highlight the major functions performed and explain them in such a manner that a reader totally unfamiliar with the system could understand. The subsections of 2.1, System Description, and 2.3, General Description, should be read first to obtain an introduction to the purpose of the Tape Processor. The flow diagram is annotated with subroutine names wherever possible in order to link the overall logic of the processor with the individual functions of each routine.

Figure 2-3. Common Block Cross-Reference (Tape Processor)

The majority of information is passed between routines via common blocks. This figure should assist the reader in understanding which data elements, or blocks of elements, are used in which routines. This should be especially useful when trying to trace an individual element throughout the entire processor, or in cases where a new common block variable is added. If a new variable is added to a common block, this table will show immediately which routines will have access to the new variable.

Table 2-1. Common Block Dictionary (Tape Processor)

The Common Block Dictionary identifies the individual arrays or variables defined within each common block. This table will serve as a useful tool in tracing a specific data element throughout the processor. The Data Dictionary, described on the following page, is also useful in describing the function and usage of each common block element.

Figure 2-4. Program Unit Hierarchy (Tape Processor)

This figure shows the structure of all the routines within the Tape Processor. The processor is comprised of one main program and a series of subroutines, all of which are controlled, directly or indirectly, by the main program. This chart shows how the processor flows from the main program through each of the subroutines. Figure 2-4, along with Figure 2-5, allows the reader to see which routines are called by other routines, rather than by the main program.

Figure 2-5. Subroutine Cross-Reference (Tape Processor)

The subroutine cross-reference provides an explanation of which routines control the processing of other routines. On the vertical axis (side of page), the calling (controlling) routines are shown. The routines called are shown on the horizontal axis (top of page). A dot in the appropriate column links the called routine with the controlling routine.

Table 2-2. Data Dictionary (Tape Processor)

This table provides a description of every common block element in the Tape Processor. This listing includes both variables and arrays and describes the size, format, uses and purpose of each data element. This table should be used as the main reference for information on the purpose, or other characteristics, of a data element.

Figures 2-6 through 2-11, Report Layouts (Tape Processor)

These figures provide a layout of the reports produced by the Tape Processor. These figures will be referenced within individual program descriptions wherever applicable and provide further information on the format and content of each report.

All of the above figures and tables are referenced throughout this subsection. They have all been placed at the front of the section for ease of reference.



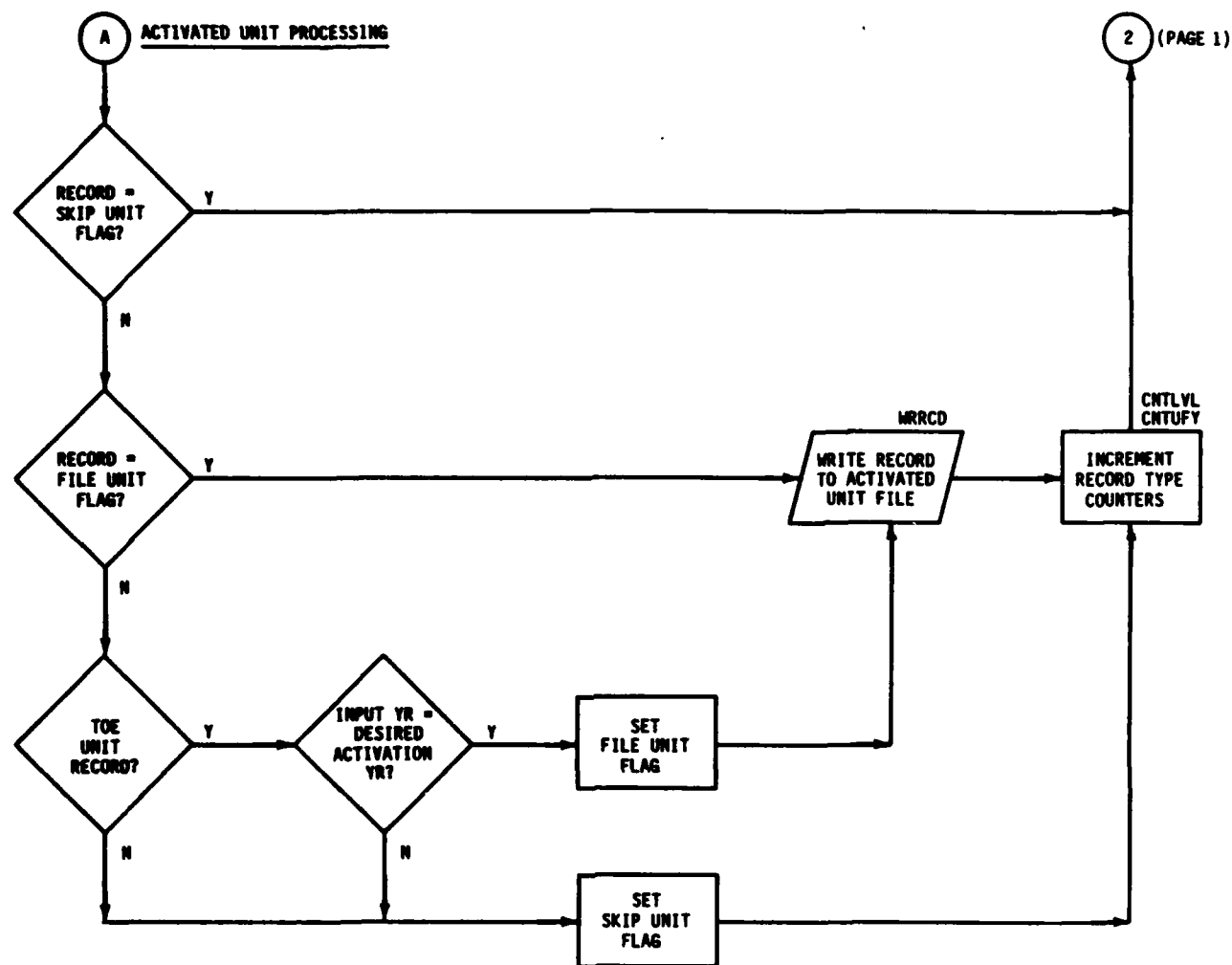


Figure 2-2. Tape Processor Flow Diagram
(page 2 of 3 pages)

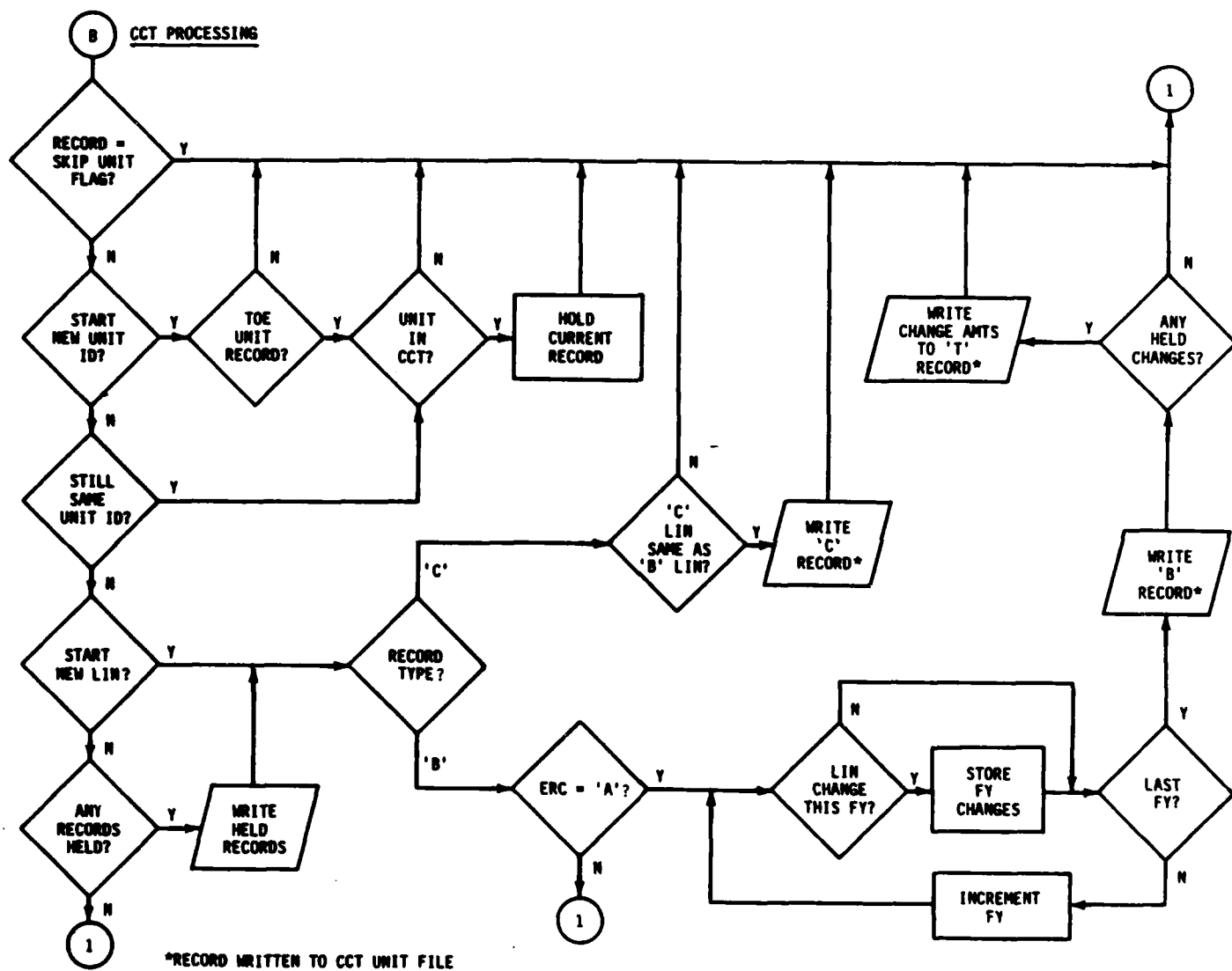


Figure 2-2. Tape Processor Flow Diagram
(page 3 of 3 pages)

ROUTINE	1	2	3	4	5	6	7	8	9	10
ANYSRC	●		●				●			
CCTLST	●	●		●	●			●		
CHKEQP	●		●		●	●				
CHKLST	●	●								
CHKSRC	●	●	●		●	●				
CNTLVL	●									●
CNTUFY	●	●								●
DECODE	●		●							
DSYALL	●									
DSYCTL										
DSYCT1				●	●					
DSYCT2	●									
DSYNW1	●									●
DSYNW2										●
DSYNW3										●
ENCODE		●	●		●	●				
MAIN	●	●								●
PAGADV										
PIKCCT	●		●			●				
PIKNEW	●	●	●							
RDRCD	●		●							
RDUNT		●								
WRCCT			●							
WRHDG		●								
WRNMSG	●								●	
WRRCD			●							
WRTTL		●								
XLATE				●						

Diagram illustrating the COMMON BLOCK structure. The routines are mapped to specific blocks as follows:

- ANYSRC, CCTLST, CHKEQP, CHKLST, CHKSRC, CNTLVL, CNTUFY, DECODE, DSYALL, DSYCTL, DSYCT1, DSYCT2, DSYNW1, DSYNW2, DSYNW3, ENCODE, MAIN, PAGADV, PIKCCT, PIKNEW, RDRCD, RDUNT, WRCCT, WRHDG, WRNMSG, WRRCD, WRTTL, XLATE
- XCONTROL
- XINPUT
- XRCD
- XSRCCT
- XSRCDTA
- XSRC SAV
- XSRC THP
- XSUM VL

Figure 2-3. Common Block Cross-Reference (Tape Processor)

Table 2-1. Common Block Dictionary (Tape Processor)

<u>COMMON BLOCK</u>	<u>VARIABLES</u>
XCONTRL	CTLLVL, SKPLVL, XFRLVL, TYPUNT, ACTYR, IALL, SRC, WRNCT
XINPUT	EDATE, FRSTFY, DTADTE, NFYSET, NEWUNT, NNEW, RUNCLS, CCTID, SPCLST, WRNPAS
XRCD	RECORD, RCDTYPE, TRCORD
XSRCNT	POSELD, NEGLFLD, ZROFLD, ADDSKP, PERSKP, EQPTOT
XSRCDTA	CHGSRC, CHGLIN, CHGAMT, NSRC, NEQP
XSRCSAV	SRCFY, SAVRCD, NRCD, ISRC, IEQP, LSTRCD
XSRICTMP	TMPSRC, TMPLIN
XSUMLVL	TOEFLD, NONSKP, TOESKP, AUGSKP, TDASKP, POMSKP, UNTID, UNTFY

NOTE: Refer to Table 2-2 for additional information on Tape Processor variables.

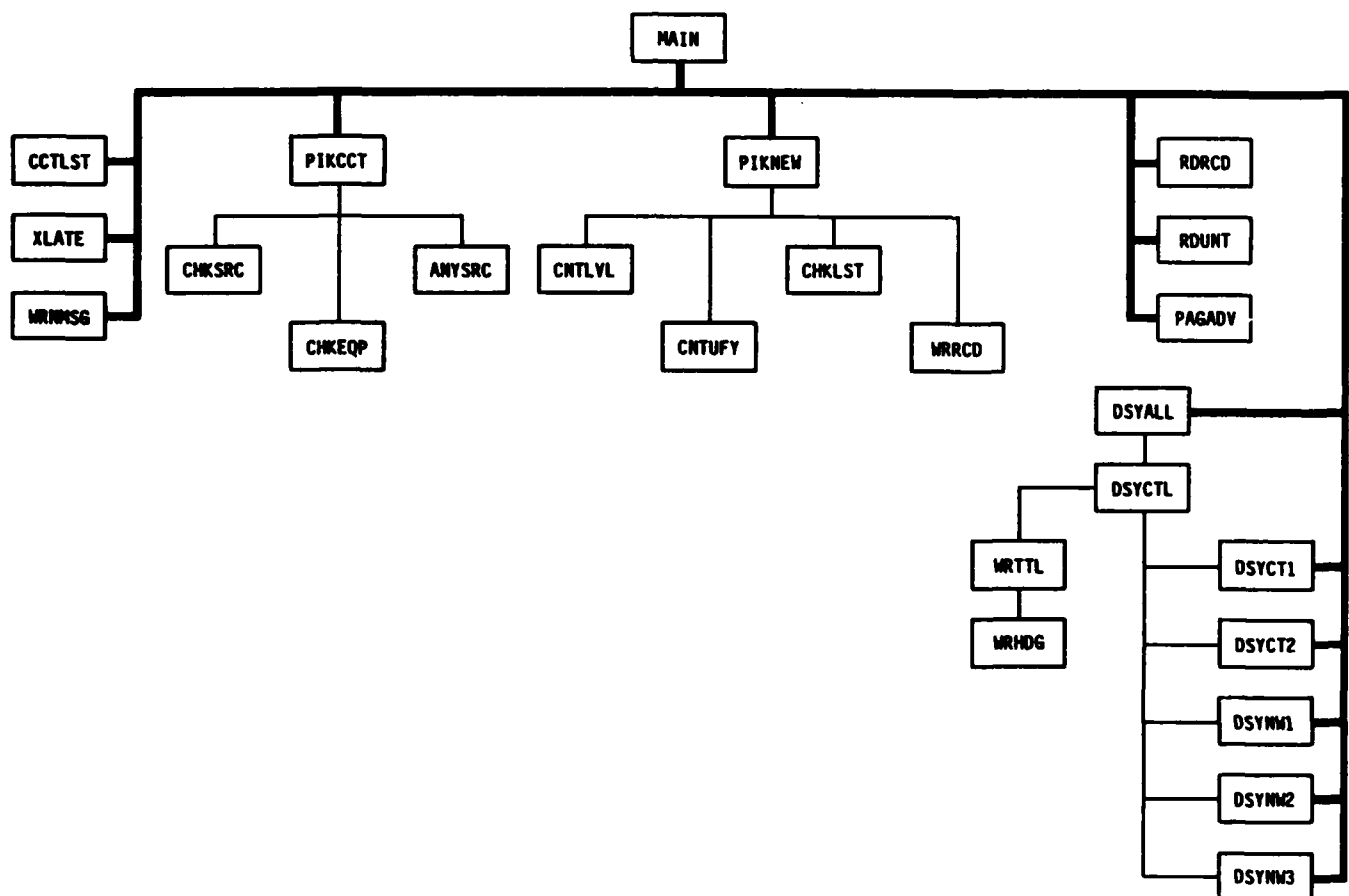


Figure 2-4. Program Unit Hierarchy (Tape Processor)

	CALLED ROUTINE																						
	ANYSRC	CCTLST	CHKEQP	CHKLST	CHKSRC	CNTLVL	CNTUFY	DECODE	DSYALL	DSYCTL	DSYCT1	DSYCT2	DSYNM1	DSYNM2	DSYNM3	ENCODE	MAIN	PAGADV	PIKCCT	PIKNEW	RDRCD	RDUNT	WRCCT
CALLING ROUTINE	ANYSRC											•											
	CCTLST	•																					
	CHKEQP		•													•							
	CHKLST			•																			
	CHKSRC				•																		
	CNTLVL					•																	
	CNTUFY						•																
	DECODE							•															
	DSYALL								•														
	DSYCTL									•													
	DSYCT1										•												
	DSYCT2											•											
	DSYNM1												•										
	DSYNM2													•									
	DSYNM3														•								
	ENCODE															•							
	MAIN		•					•	•		•	•	•	•	•		•	•	•	•	•	•	
	PAGADV																•	•	•	•	•	•	
	PIKCCT	•		•				•										•	•	•	•	•	
	PIKNEW				•		•	•	•														•
	RDRCD																				•		
	RDUNT																					•	
	WRCCT																						•
	WRHDG																						
	WRMSG																						
	WRCO																						
	WRTTL																						
	XLATE																						

Figure 2-5. Subroutine Cross-Reference (Tape Processor)

Table 2-2. Data Dictionary - Tape Processor
(page 1 of 6 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
ACTYR	CHKSRC(P) CNTUFY(P) DECODE(I)* DSYALL(P) PIKNEW(P)	N/A	I2	Fiscal Year in A-record.
ADDSKP	CCTLST(P)* DSYCT1(O)	1,000	I4	Total number of change records adding new equipment for each SRC (max 1,000).
AUGSKP	CNTLVL(P)* DSYNW1(O)	N/A	I4	Count of augmented units.
CCTID	MAIN(I)* WRHDG(O)	N/A	A6	The CCT identifier to be displayed on reports.
CHGAMT	CCTLST(P)* ENCODE(O)	(1,000x40)	I	The amount of the change for each item of equipment, (max 40) per SRC (max 1,000).
CHGLIN	CCTLST(P)* CHKEQP(P)	(1,000x40)	A6	The ID of LIN's affected by a CCT change, (max 40) per SRC (max 1,000).
CHGSRC	CCTLST(P)* CHKSRC(P) DSYCT1(O)	1,000	A9	The SRC's extracted from the CCT file (max 1,000).
CTLLVL	ANYSRC(P) CHKLST(P) CNTUFY(P) DSYALL(P) DSYCT2(P) MAIN(P) PIKCCT(P) PIKNEW(P) RDRCD(I)*	N/A	A6	The unit ID extracted from the A-record.

Table 2-2. Data Dictionary - Tape Processor
(page 2 of 6 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
DTADTE	MAIN(I)* WRTTL(O)	N/A	A8	TAEDP run date (MM/DD/YY).
EQPTOT	CCTLST(P)* DSYCT1(P)	1,000	I4	Total number of usable LIN changes for each SRC (max 1,000).
FRSTFY	CHKSRC(P) CNTUFY(P) MAIN(I,P)* PIKNEW(P)	N/A	I2	First Fiscal Year of planning period.
IALL	CNTLVL(P)* DSYNW1(O)	N/A	I4	Count of all units processed.
IEQP	CCTLST(P)* CHKEQP(P) ENCODE(P)	N/A	I2	Index for number of LIN's in an SRC.
ISRC	CHKSRC(P)*	N/A	I3	Index for SRC table.
LSTRCD	CHKEQP(P)* CHKSRC(P)* PIKCCT(P)*	N/A	A1	Record type of previous record.
LSTSRC	ANYSRC(P) CCTLST(P)* CHKSRC(P)*	N/A	A9	SRC of previous record.
NEGFLD	CCTLST(P)* DSYCT1(O)	1,000	I4	The total number of LIN's for each SRC with a negative change amount (max 1,000).
NEQP	CCTLST(P)* CHKEQP(P)	1,000	I	Total number of LIN changes processed for each SRC (max 1,000).

Table 2-2. Data Dictionary - Tape Processor
(page 3 of 6 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
NEWUNT	CHKLST(P) RDUNT(I)*	400	A6	The ID of units activated in the first Fiscal Year (max 400).
NFYSET	MAIN(P)* WRHDG(O)	7	I	The seven fiscal years of the planning period expressed as the last two digits of the year.
NNEW	CHKLST(P) RDUNT(P)*	N/A	I4	Number of units from first year activations file.
NONSKP	CNTLVL(P)* DSYNW1(O)	N/A	I4	Count of non-units skipped.
NRCD	ANYSRC(P) CHKSRC(P)* PIKCCT(P)*	N/A	I2	Temporary table index.
NSRC	CCTLST(P)* CHKSRC(P) DSYCT1(P)	N/A	I4	Total number of SRC's processed in CCT file.
PERSKP	CCTLST(P)* DSYCT1(P,O)	1,000	I4	The number of personnel change records skipped for each SRC (max 1,000).
POMSKP	CNTLVL(P)* DSYNW1(O)	N/A	I4	Total number of POMCUS units skipped.
POSFLD	CCTLST(P)* DSYCT1(P,O)	1,000	I4	The number of LIN's for each SRC with a positive change amount (max 1,000).
RCDTYP	CHKEQP(P) PIKCCT(P) PIKNEW(P) RDRCD(I)*	N/A	A1	The type of the TAEDP record (A, B, C).

Table 2-2. Data Dictionary - Tape Processor
(page 4 of 6 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
RECORD	ANYSRC(P) CHKEQP(P) CHKSRC(P) DECODE(I) PIKNEW(P) RDRCD(I)* WRCCT(P) WRRCD(O)	N/A	A239	The TAEDP input record.
RUNCLS	MAIN(I)* WRTTL(O)	N/A	A12	The classification of the run.
SAVRCD	ANYSRC(P) CHKSRC(P)*	7	A239	Used to preserve up to seven A-records during CCT processing.
SKPLVL	ANYSRC(P)* MAIN(P) PIKCCT(P)* PIKNEW(P)*	2	A6	Used to preserve a unit ID already determined as one to be skipped. First element preserves ID for activated unit processing. Second element preserves ID for CCT unit processing.
SPCLST	MAIN(I,P)* PIKNEW(P)	N/A	A3	A 'YES' or 'NO' flag for the Special List function.
SRC	CHKSRC(P) DECODE(I)*	N/A	A9	The SRC from the TAEDP record.
SRCFY	ANYSRC(P) CHKEQP(P) CHKSRC(P)* ENCODE(O) PIKCCT(P)	7	I	Used to save SRC number of an SRC match, by Fiscal Year.
TDA SKP	CNTLVL(P)* DSYNW1(O)	N/A	I4	Count of the TDA units skipped.

Table 2-2. Data Dictionary - Tape Processor
(page 5 of 6 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
TMPLIN	CCTLST(I,P)* WRNMSG(O)	N/A	A6	The LIN from the CCT record.
TMPSRC	CCTLST(I,P)* WRNMSG(O)	N/A	A9	The SRC from the CCT record.
TOEFLD	CNTLVL(P)* DSYNW1(O) DSYNW2(O)	N/A	I4	The number of TOE units selected.
TOESKP	CNTLVL(P)* DSYNW1(O)	N/A	I4	The number of TOE units skipped.
TRCORD	CHKEQP(P) ENCODE(O)* WRCCT(P,O)	N/A	A239	The T-record with equipment change amounts.
TYPUNT	DECODE(I)* DSYALL(P) PIKCCT(P) PIKNEW(P)	N/A	I1	The unit type from the TAEDP record.
UNTFY	CNTUFY(P)* DSYNW2(O) DSYNW3(P)	7	I	Number of units processed in each fiscal year
UNITID	CNTUFY(P)* DSYNW3(O) MAIN(P)	(7x400)	A6	The unit ID's for activated units selected from TAEDP for each Fiscal Year for up to 400 units.
WRNCNT	CCTLST(P) MAIN(P) WRNMSG(P)*	N/A	I1	The number of warning messages generated.
WRNPAS	CCTLST(P) MAIN(I)*	N/A	A3	A 'YES' or 'NO' flag signifying warning message bypass.
XFRLVL	PIKNEW(P)*	N/A	A6	A unit ID to be output.

Table 2-2. Data Dictionary - Tape Processor
(page 6 of 6 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
ZROFLD	CCTLST(P)* DSYCT1(O,P)	N/A	I4	The number of equipment deletions.

Note: The letter (P, I, O) next to the subroutine names denotes the usage of the table as follows:

- (P) - processing
- (I) - input
- (O) - output

* An asterisk occurring to the right of the routine name indicates that the table is originated by that routine.

Note: The letter (A, I) in the format column of the table denotes the array characteristics as follows:

- (A) - alphanumeric
- (I) - integer

74/UNCLASSIFIED/ 25 JUL 83 /PG 7

EDATE MODEL
DISPLAY TP-NW-1

TAPE PROCESSOR RUN

PAGE 1

DATA DATE: TESTDATA
REPT DATE: 07/25/83

UNIT SUMMARY

***** UNCLASSIFIED *****

NR UNITS ACTIVATED IN FY 82 THRU FY 88

TOTAL UNITS	TOTAL TOE	TOTAL NON	TOTAL TOE	TOTAL AUG TOE	TOTAL TDA	TOTAL POM
READ	FILED	SKIPPED	SKIPPED	SKIPPED	SKIPPED	SKIPPED
20	19	0	1	0	0	0

Figure 2-6. Report #1, Unit Summary

74/UNCLASSIFIED/ 25 JUL 83 /PG 8

EDATE MODEL
DISPLAY TP-NW-2TAPE PROCESSOR RUN
FY SUMMARYPAGE 1
DATA DATE: TESTDATA
REPT DATE: 07/25/83

***** UNCLASSIFIED *****

NR UNITS ACTIVATED IN EACH FY

TOTAL UNITS	TOTAL FY 82	TOTAL FY 83	TOTAL FY 84	TOTAL FY 85	TOTAL FY 86	TOTAL FY 87	TOTAL FY 88
FILED	FILED	FILED	FILED	FILED	FILED	FILED	FILED
19	3	2	1	2	4	2	5

Figure 2-7. Report #2, FY Summary

74/UNCLASSIFIED/ 25 JUL 83 /PG 9

EDATE MODEL
DISPLAY TP-NW-3TAPE PROCESSOR RUN
UNITS FILEDPAGE 1
DATA DATE: TESTDATA
REPT DATE: 07/25/83

***** UNCLASSIFIED *****

UNITS ACTIVATED IN EACH FY

FY 82 FILED	FY 83 FILED	FY 84 FILED	FY 85 FILED	FY 86 FILED	FY 87 FILED	FY 88 FILED
UNT001	UNT006	UNT019	UNT015	UNT014	UNT003	UNT007
UNT004	UNT008		UNT020	UNT016	UNT013	UNT009
UNT005				UNT017		UNT010
				UNT018		UNT011
						UNT012

Figure 2-8. Report #3, Units Filed

PAGE 1

DATA DATE: TESTDATA
REPT DATE: 07/25/83TAPE PROCESSOR RUN
CCT SRC SUMMARYEDATE MODEL
DISPLAY TP-CI-1

***** UNCLASSIFIED *****

EQUIPMENT/PERSONNEL RECORDS BY SRC IN OCT 300-73

NR	SRC	INCR FLD	DECR FLD	DRUP FLD	TOT FLD	PER SKP	AUD SKP	TOT SCN	TOT OVR	NR	SRC	INCR FLD	DECR FLD	DRUP FLD	TOT FLD	PER SKP	AUD SKP	TOT SCN	TOT OVR
1	01226H700	4	0	0	4	0	0	4	0	2	05114H200	6	1	5	12	6	3	21	0
3	05150H710	4	0	8	12	9	4	25	0	4	04307H600	4	0	4	8	9	8	21	0
5	06350H000	2	1	6	9	0	4	13	0	6	07004H000	3	2	9	14	5	4	23	0
7	08032H000	0	1	4	5	0	4	9	0	6	08120H300	0	0	3	3	0	0	3	0
9	10227H500	0	2	4	6	0	2	8	0	10		0	0	0	0	0	0	0	0

Figure 2-9. Report #4, CCT SRC Summary

EDATE MODEL
DISPLAY IP-AL-1

TAPE PROCESSOR RUN
UNITS SCANNED

DATA DATE: TESTDATA
REPT DATE: 07/25/83

PAGE 1

***** UNCLASSIFIED *****

UNITS PRESENT IN TAEDP FILE

UNIT001 182	UNIT002 182	UNIT003 187	UNIT004 182	UNIT005 182	UNIT006 183	UNIT007 186	UNIT008 183	UNIT009 188	UNIT010 183
UNIT011 186	UNIT012 186	UNIT013 187	UNIT014 186	UNIT015 185	UNIT016 186	UNIT017 186	UNIT018 186	UNIT019 184	UNIT020 185

Figure 2-10. Report #5, Units Scanned

EDATE MODEL
DISPLAY TP-CT-2

TAPE PROCESSOR RUN
CCT UNITS SUMMARY

DATA DATE: TESTDATA
REPT DATE: 03/18/83

PAGE 1

***** UNCLASSIFIED *****

UNITS IMPACTED BY CCT 300-73

UNT001

UNT002

UNT003

UNT004

UNT006

UNT010

UNT012

UNT013

UNT014

UNT

Figure 2-11. Report #6, CCT Unit Summary

2.4.1 Program Description

a. Identification

Tape Processor - MAIN

b. Functions

This program controls the processing of the Tape Processor. The functions performed include reading the Run Control Parameters input by the user, reading the TAEDP input tapes and comparing them to either (or both) the First Year Activated Unit List and/or the Consolidated Change Table (CCT) Data for selection purposes. Once all of the desired units have been extracted from the TAEDP file and written to either the Activated Unit File or CCT Unit file, a series of six summary reports are produced and processing is ended.

c. Input

This process requires the following files as input:

- Run Control Parameter File (MTOE*TP1CTL01); Unit #2.
- TAEDP File (MTOE*TP1TST00); Unit #7.
- First Year Activated Unit List (MTOE*TP1FYA00); Unit #8.
- Consolidated Change Table (CCT) File (MTOE*TP1SRC00); Unit #9.
- Common blocks XCONTRL, XINPUT, XSUMLVL

Note: More detailed information on these files is contained in subsection 3.3, Data Base.

d. Processing

The processing of MAIN is described as follows:

- Begin Tape Processor.
- Read user-input Run Control Parameters.
- If Newly Activated Units are to be used for selection, call RDUNT to read the New Activated Units File.
- If Consolidated Change Table (CCT) is to be used for selection, call CCTLST to read the CCT file.
- Call DSYALL ('FRST') to write the page headings for Report #5, the Units Scanned Report.
- If CCT record selection is chosen, call DSYCT2 ('FRST') to write Report #6, CCT Unit Summary Report, page headings.
- (Label 100); call RDRCD to read a TAEDP record, at EOF go to label 200.

- If unit ID has changed since previous record,
 - Call DECODE ('A') to extract fiscal year, unit type, and SRC from TAEDP record.
 - Call DSYALL ('NEXT') to add the new unit ID to the Report #5 detail line.
- If New Activation record selection is chosen, call PIKNEW to search First Year Activated Unit List for a match.
- If Special List is used, return to label 100.
- If CCT record selection is chosen, call PIKCCT to search CCT by SRC for a match.
- Return to label 100.
- (Label 200); complete Reports #5 and #6.
- Call DSYCT1 to generate Report #4.
- Call DSYNW1 to generate Report #1
- Call DSYNW2 to generate Report #2.
- Call DSYNW3 to generate Report #3.
- Terminate Tape Processor.

e. Output

The following outputs are produced by the Tape Processor:

- Activated Unit File (MTOE*TP1NEW40); Unit #11.
- CCT Unit File (MTOE*TP1CCT40); Unit #12.
- Unit Summary Report (Report #1); refer to Figure 2-6 for sample.
- FY Summary Report (Report #2); refer to Figure 2-7 for sample.
- Units Filed Report (Report #3); refer to Figure 2-8 for sample.
- CCT SRC Summary Report (Report #4); refer to Figure 2-9 for sample.
- Units Scanned Report (Report #5); refer to Figure 2-10 for sample.
- CCT Unit Summary Report (Report #6); refer to Figure 2-11 for sample.

Note: More detailed information on the output files and reports are contained in subsection 3.3, Data Base.

f. Interfaces

Since this is the controlling module, no other program calls MAIN.

This program calls the following subroutines. The arguments are shown in parenthesis.

CCTLST
DECODE ('A')
DSYALL ('FRST') ('NEXT') ('LAST')
DSYCT1
DSYCT2 ('FRST') ('LAST')
DSYNW1
DSYNW2
DSYNW3
PAGADV
PIKCCT
PIKNEW
RDRCD (*200)
RDUNT

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.2 Program Description

a. Identification

Tape Processor - ANYSRC (*, *)

b. Functions

This subroutine tests whether SRC changes are present for a unit after all A-records have been examined. The table SRCFY is examined to check if any value is greater than zero, thus representing that an A-record from the TAEDP was found in the CCT.

c. Input

Common blocks XCONTRL, XRCD, XSRC SAV

d. Processing

The processing of ANYSRC is described as follows:

- Search the SRCFY table to see if any entries are greater than zero. Each entry will represent the index number of the SRC from the CCT file when a match was found with the TAEDP record. If all entries are zero, then no match was found for any of the seven TAEDP 'A' records.
- If SRCSUM > 0, then (at least one of the 'A' records matched the CCT):
 - Call DSYCT2 to write the unit to Report #6.
 - Update the 'A' record with a '1' in position 14.
 - Call WRRCD to write the record to the CCT Unit File.
 - Return 1 to signify that a match was found.
- If SRCSUM = 0, then there were no matches, and return 2 to signify no match.

e. Output

The TAEDP record is prepared for output to File 12 (CCT Unit File) by moving a '1' to position 14.

f. Interfaces

Called by: PIKCCT

Calls to: DSYCT2 ('NEXT')
WRRCD (12, *180)

g. Arguments

Two arguments are passed to this subroutine. Each argument controls a numbered return in the calling routine and is represented by an asterisk (*).

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.3 Program Description

a. Identification

Tape Processor - CCTLST

b. Functions

This subroutine loads the CCT file tape into a table for subsequent processing. The table CHGSRC is loaded with all of the SRC's from the CCT up to a maximum of 1,000.

c. Input

- The Consolidated Change Table (CCT) Data (Unit #9) is read in this subroutine. Additional information on this file may be found in subsection 3.3, Data Base.
- Common blocks XCONTRL, XINPUT, XSRCNT, XSRCDTA, XSRCIMP.

d. Processing

The processing of CCTLST is described as follows:

- (Label 100); read a CCT record.
- If the maximum number of SRC's have already been loaded and the SRC is the same as the previous record, go to label 100 to read the next record.
- If the SRC is new
 - Save equipment count for previous SRC.
 - If number of SRC's read exceeds 1,000:
 - Write a warning message.
 - Reset the SRC hold variable.
 - Go to label 100 to read next record.
- If the CCT record type = 'C' indicating a personnel record, not an equipment record, then increment a counter and go to label 100.
- Convert the least significant digit of the equipment change amount.
- If change amount conversion is unsuccessful, read the next record at label 100.
- If more than 30 equipment records have been processed for the SRC, print a warning message and go to label 100.
- Increment counter for type of equipment change (increase, decrease or elimination).
- Store counters, write an end of processing message, and return.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: WRNMSG (3)(4)
XLATE (change amount, change letter, returned
amount, *100)

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.4 Program Description

a. Identification

Tape Processor - CHKEQP

b. Functions

This subroutine is referenced for those TAEDP units whose SRC was located in the CCT file. The purpose of this subroutine is to process the 'B' records and 'C' records from the TAEDP for these selected CCT related units.

c. Input

Common blocks XCONTRL, XRCD, XSRCDTA, XSRCSAV

d. Processing

The processing of CHKEQP is described as follows:

- If record type = 'B' (sets of 'B' and 'C' records will follow the 7 'A' records on the TAEDP tape):
 - Extract LIN (equipment identifier) from TAEDP record.
 - If LIN hasn't changed, write the record immediately by going to label 95.
 - If LIN has changed:
 - Extract ERC from TAEDP.
 - If ERC is not = 'A', then return.
 - For each fiscal year
 - If SRC is the same as previous year, then call ENCODE to write change amount to the T-record.
 - Else if new SRC, compare equipment item number and call ENCODE.
 - (Label 95); call WRRCD (12, *100) to write the TAEDP record to the CCT Unit File.
 - Call WRCCT (12) to write the T-record for the previous SRC.
- If a C-record is found immediately after a B-record and the equipment item is the same on each record, then call WRRCD (12, *200) to write the C-record to the file.

e. Output

Calls WRRCD and WRCCT to control the creation of the CCT Unit File.

f. Interfaces

Called by: PIKCCT

Calls to: ENCODE (fiscal year index)
WRCCT (12,*)
WRRCD (12,*)

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.5 Program Description

a. Identification

Tape Processor - CHKLIST (*)

b. Functions

This subroutine accesses a user-prepared list of units activated in the first year of the seven-year planning cycle, to check if the unit ID on the current TAEDP record exists as a new activation in the Activated Unit File.

c. Input

Common blocks XCONTRL, XINPUT

d. Processing

The processing of CHKLIST is described as follows:

- For 1 to the total number of units in the First Year Activated Unit List compare the TAEDP unit ID to each new activation ID.
- If TAEDP unit ID is found, Return, else Return 1.

e. Output

None.

f. Interfaces

Called by: PIKNEW (*)

Calls to: None

g. Arguments

An argument is passed to this routine for a numbered return, represented by an asterisk (*).

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.6 Program Description

a. Identification

Tape Processor - CHKSRC

b. Functions

This subroutine tests the SRC of a TAEDP unit against the SRC in the CCT File in order to find a match. The function of this subroutine is similar to CHKLST which tests the TAEDP unit ID against the file of new activations.

c. Input

Common blocks XCONTRL, XINPUT, XRCB, XSRCDTA, XSRC SAV

d. Processing

The processing of CHKSRC is described as follows:

- If SRC = SRC from previous TAEDP record:
 - Load the CCT index number for that SRC into SRCFY (fiscal year index) table.
 - Save record into SAVRCD table and return.
- Search CCT file for match with TAEDP SRC.
 - If a match is found:
 - Load SRC index number into SRCFY table.
 - Load TAEDP record into SAVRCD table.
 - Return.
 - Else, Return.

e. Output

None.

f. Interfaces

Called by: PIKCCT

Calls to: None

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.7 Program Description

a. Identification

Tape Processor - CNTLVL (ITYPE)

b. Functions

This subroutine counts the number of different types of units read from the TAEDP during processing. The unit type is passed as an argument, and the proper counter is incremented according to the argument value.

c. Input

Common blocks XCONTRL, XSUMLVL

d. Processing

The processing of CNTLVL is described as follows:

- If ITYPE = 0
Add 1 to counter for non-units skipped.
- If ITYPE = 1
Add 1 to counter for 'TOE' units skipped.
- If ITYPE = 2
Add 1 to counter for 'AUG' units skipped.
- If ITYPE = 3
Add 1 to counter for 'TDA' units skipped.
- If ITYPE = 4
Add 1 to counter for 'POM' units skipped.
- If ITYPE = 5
Add 1 to counter for 'TOE' units saved.

e. Output

None.

f. Interfaces

Called by: PIKNEW

Calls to: None

g. Arguments

ITYPE - The TAEDP record type designation

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.8 Program Description

a. Identification

Tape Processor - CNTUFY

b. Functions

This subroutine counts the number of selected TOE units activated each fiscal year. The unit ID of all selected units is also preserved.

c. Inputs

Common blocks XCONTRL, XINPUT, XSUMLVL

d. Processing

The processing of CNTUFY is described as follows:

- Add 1 to the UNTFY table for number of units selected for that fiscal year.
- Store the unit ID of the selected unit in the table UNTID subscripted by year and unit index number.

e. Outputs

None.

f. Interfaces

Called by: PIKNEW

Calls to: None

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.9 Program Description

a. Identification

Tape Processor - DECODE (LTR)

b. Function

This subroutine utilizes the FORTRAN command DECODE to move certain portions of the TAEDP record to variables for fiscal year, unit type and system readiness code.

c. Inputs

Common blocks XCONTRL, XRCD

d. Processing

The processing of DECODE is described as follows:

- If the parameter = 'A':
 - Extract ACTYR (fiscal year) from columns 46-47.
 - Extract TYPUNT (unit type) from column 110.
 - Extract SRC (system readiness code) from columns 185-193.
 - Return.
- Else, Return.

e. Output

None.

f. Interfaces

Called by: MAIN
PIKCCT
PIKNEW
RDRCD

Calls to: None

g. Arguments

LTR - A flag, usually with the value of 'A', signifying the record type to be decoded.

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.10 Program Description

a. Identification

Tape Processor - DSYALL (STATUS)

b. Functions

This subroutine controls the printing of the Units Scanned Report (#5). The UIC, unit type and first fiscal year of each unit read on the TAEDP file is printed. All units are printed in sets of 10 per line.

c. Inputs

Common block XCONTRL

d. Processing

The processing of DSYALL is described as follows:

- If the STATUS parameter = 'FRST':
 - Call DSYCTL (5) to print the page header.
 - Return.
- If the STATUS parameter = 'NEXT':
 - Accumulate unit information into print holding tables.
 - If 10 units have been accumulated, print the detail line on the printer.
 - Return.
- If the STATUS parameter = 'LAST':
 - Print the final detail line.
 - Return.

e. Outputs

- Calls DSYCTL to print Report #5 page headers.
- Writes a detail line for every 10 units for Report #5.
- Calls DSYCTL to control formatting of detail lines on the page.

f. Interfaces

Called by: MAIN ('FRST') ('NEXT') ('LAST')

Calls to: DSYCTL (5)

g. Arguments

STATUS - Signifies the sequencing of the detail lines being written, where

'FRST' - first line printed

'NEXT' - intermediate lines printed

'LAST' - last line printed

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.11 Program Description

a. Identification

Tape Processor - DSYCTL (DSYNR)

b. Functions

This subroutine controls the formatting of the detail lines in the six reports generated by the Tape Processor. The lines are grouped into blocks, and the number of lines per block and the number of blocks per page are established separately for every report.

c. Inputs

None.

d. Processing

The processing of DSYCTL is described as follows:

- Assume a continuation of the previous report if DSYNR has not changed.
- If a new report:
 - Call WRTTL (DSYNR, 1) to print first page headers.
 - Return.
- If the maximum number of lines per block has been reached:
 - Write a blank line and reinitialize counters.
 - Return.
- If the maximum number of blocks per page has been reached:
 - Increment page counter and call WRTTL.
 - Return.

e. Outputs

- Calls WRTTL (report #, page #) to print page headers.
- Prints blank lines to separate blocks of lines.

f. Interfaces

Called by: DSYALL (5)
 DSYCT1 (4)
 DSYCT2 (6)
 DSYNW1 (1)
 DSYNW2 (2)
 DSYNW3 (3)

Calls to: WRTTL (report #, page #)

g. Arguments

DSYNR - The report number (value of 1-6)

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.12 Program Description

a. Identification

Tape Processor - DSYCT1

b. Functions

This subroutine prints the text of Report #4, the CCT SRC Summary.

c. Input

Common blocks XSRCCNT, XSRCDTA

d. Processing

The processing of DSYCT1 is described as follows:

- Print two SRC's per block for every SRC on the TAEDP that matched the CCT file.
- On every detail line, print the following items for each SRC displayed:
 - Number of equipment increases.
 - Number of equipment decreases.
 - Number of equipment eliminations.
 - Total number of equipment records selected.
 - Total number of records skipped where type = 'C'.
 - Total number of records skipped where a new piece of equipment was being added.
 - Total number of equipment records scanned.
 - Total number of equipment records over the limit of 30 per SRC.

e. Output

Prints the detail lines of Report #4, the CCT SRC Summary.

f. Interfaces:

Called by: MAIN

Calls to: DSYCTL (4)

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.13 Program Description

a. Identification

Tape Processor - DSYCT2 (STATUS)

b. Functions

This subroutine generates Report #6, the CCT Unit Summary.

c. Input

Common block XCONTRL

d. Processing

The processing of DSYCT2 is described as follows:

- If STATUS = 'FRST':
 - Call DSYCTL(6) to print page headers.
 - Return.
- If STATUS = 'NEXT':
 - Accumulate unit information into print holding table.
 - If 10 units have been accumulated, print the detail line on file 16.
 - Return.
- If STATUS = 'LAST', print the final detail line and return.

e. Output

Calls DSYCTL(6) to print headers and format lines for Report #6.

Writes the detail lines of Report #6.

f. Interfaces

Called by: ANYSRC
 MAIN

Calls to: DSYCTL (6)

g. Arguments

STATUS -Signifies the sequencing of the detail lines
being written, where

'FRST' - first line printed

'NEXT' - intermediate lines printed

'LAST' - last line printed

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.14 Program Description

a. Identification

Tape Processor - DSYNW1

b. Functions

This subroutine produces Report #1, the Unit Summary Report.

c. Input

Common blocks XCONTRL, XSUMLVL

d. Processing

The processing of DSYNW1 is described as follows:

- Call DSYCTL(1) to print report headers.
- Write the report detail line containing the following:
 - IALL - total number of units processed.
 - TOEFLD - total TOE units filed.
 - NONSKP - total non-units skipped.
 - TOESKP - total TOE units skipped.
 - AUGSKP - total augmented TOE units skipped.
 - TDASKP - total TDA units skipped.
 - POMSKP - total POMCUS units skipped.

e. Output

Report #1, the Unit Summary Report.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (1)

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.15 Program Description

a. Identification

Tape Processor - DSYNW2

b. Functions

This subroutine produces Report #2, the FY Summary Report.

c. Input

Common block XSUMLVL

d. Processing

The processing of DSYNW2 is described as follows:

- Call DSYCTL(2) to print report headers.
- Write the report detail line containing the following:
 - Total TAEDP units filed.
 - Total units filed for fiscal year 1 thru 7.

e. Output

Report #2, the Fiscal Year Summary Report.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (2)

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.16 Program Description

a. Identification

Tape Processor - DSYNW3

b. Functions

This subroutine produces Report #3, the Units Filed Summary Report. All of the units selected from the TAEDP will be displayed.

c. Input

Common block XSUMLVL

d. Processing

The processing of DSYNW3 is described as follows:

- Extract highest value in UNTFY to determine the maximum number of lines to be printed for any fiscal year on the report.
- Until all the unit ID's have been printed, print a detail line formatted by fiscal year across the page.

e. Output

Report #3, the Units Filed Summary Report.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.17 Program Description

a. Identification

Tape Processor - ENCODE (IFY)

b. Functions

This subroutine uses the FORTRAN command 'ENCODE' to extract the CCT equipment change information from the CHGAMT table into an equipment change record. This equipment change record (T-record) will follow the requirements record (B-record) on the output file.

c. Input

Common blocks XINPUT, XRCD, XSRCDTA, XSRC SAV

d. Processing

The processing of ENCODE is described as follows:

- According to the fiscal year indicated by IFY, place the equipment change amount on the T-record in the following positions:
 - Year 1: Positions 130-136.
 - Year 2: Positions 146-152.
 - Year 3: Positions 162-168.
 - Year 4: Positions 178-184.
 - Year 5: Positions 194-200.
 - Year 6: Positions 210-216.
 - Year 7: Positions 226-232.

e. Output

- Values are moved to the T-record which is later written to the CCT Unit File in WRCCT.

f. Interfaces

Called by: CHKEQP

Calls to: None

g. Arguments

IFY - The fiscal year index

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.18 Program Description

a. Identification

Tape Processor - PAGADV

b. Functions

This subroutine advances the printer to a new page after all of the Tape Processor reports have been written causing the termination messages to print on a separate page.

This subroutine is called by MAIN and simply contains a carriage control command for a new page.

No other information is required for this subroutine.

2.4.19 Program Description

a. Identification

Tape Processor - PIKCCT

b. Functions

This subroutine uses the SRC from the TAEDP records to select those records that appear in the CCT. This will select those units proposed for equipment changes during the seven-year planning period. The other subroutine used to select records, PIKNEW, matches the unit against a list of units scheduled for activation during the seven-year planning period.

c. Input

Common blocks XCONTRL, XRCO, XSRCOAV

d. Processing

The processing of PIKCCT is described as follows:

- If unit ID has already been rejected, then skip the record and return.
- If current record type = 'A' and previous type is not 'A':
 - Check for a unit type of 1.
 - Call CHKSRC to try to match the SRC in the CCT file.
 - Return.
- If current record type = 'A' and previous type = 'A':
 - Call CHKSRC to handle record selection.
 - Return.
- If current record type is not 'A' and previous type = 'A':
 - Call ANYSRC to see if any of the 'A' records matched the CCT table. If there was not at least one match, all other records will be skipped for this unit.
 - Return.
- If current record type is not 'A' and previous record type is also not 'A':
 - Call CHKEQP to check the equipment records for this unit.
 - Return.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: ANYSRC (*100, *200)
 CHKEQP
 CHKSRC
 DECODE ('A')

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.20 Program Description

a. Identification

Tape Processor - PIKNEW

b. Functions

This subroutine controls the selection of those units read from the TAEDP which can be found in the First Year Activated Unit List.

c. Input

Common blocks XCONTRL, XINPUT, XRCD

d. Processing

The processing of PIKNEW is described as follows:

- If unit ID has previously been rejected, return.
- If unit ID already accepted by previous pass:
 - If record type = 'A', move '1' to position 13 of the record.
 - Call WRRCD (11, *200) to write the record to the newly activated output file. This will write the 'B' and 'C' records for a selected unit.
 - Return.
- If unit type = '1':
 - If fiscal year = year of activation, call CHKLST to try to select unit.
 - Call CNTUFY to increment fiscal year counters.
 - Call CNTLVL(5) to increment counter for a TOE unit filed.
 - Call WRRCD (11, *200) to write the record.
- else:
 - Preserve unit ID in units skipped table.
 - Call CNTLVL (unit type) to increment proper counter.
 - Return.

e. Output

Calls WRRCD to write records to the Activated Unit File.

f. Interfaces

Called by: MAIN

Calls to: CHKLST
CNTLVL (5) (TYPUNT)
CNTUFY
DECODE ('A')
WRRCD (11,*)

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.21 Program Description

a. Identification

Tape Processor - RDRCD (*)

b. Functions

This subroutine reads a TAEDP record (Unit #7) and decodes the unit ID and record type.

c. Input

- Reads the TAEDP tape file sequentially as Unit #7.
- Common blocks XCONTRL, XRCD

d. Processing

RDRCD simply reads a TAEDP record of 239 characters and places positions 1-6 in CTLLVL and position 34 in RCDTYP.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: None

g. Arguments

An asterisk represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.22 Program Description

a. Identification

Tape Processor - RDUNT

b. Functions

This subroutine reads through the user-prepared file of units scheduled for activation during the seven-year planning period, the First Year Activated Unit List. Each unit ID is saved into the table NEWUNT up to a maximum of 1,000 units.

c. Input

- Reads the First Year Activated Unit List sequentially as Unit #8.
- Common block XINPUT

d. Processing

RDUNT simply creates a table of all units to be activated (NEWUNT) by reading through the first Year Activated Unit List. At the end of the file, the total number of unit ID's read is saved in NNEW, up to a maximum of 1,000.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: None

g. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.23 Program Description

a. Identification

Tape Processor - WRCCT (IFILE)

b. Functions

This subroutine writes a T-record to the CCT Unit File. The T-record contains all of the equipment change amounts for CCT records.

c. Input

Common block XRCD

d. Processing

WRCCT initially puts header information on the T-record, including a 'T' in position 34. The record of 239 characters is then written to the CCT Unit File.

e. Output

Writes a 239-character T-record to file 12.

f. Interfaces

Called by: CHKEQP (12)

Calls to: None

g. Arguments

IFILE - The unit number of the output file. Always a value of 12 for the CCT Unit File.

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.24 Program Description

a. Identification

Tape Processor - WRHDG (DSYNR)

b. Functions

This subroutine prints the column headings for each of the six reports generated by the Tape Processor.

c. Input

Common block XINPUT

d. Processing

WRHDG prints the column headings for each Tape Processor report. Reports 1-5 are written to Unit #6 and Report #6 is written to Unit #16. Both units are print files.

See the program listings for actual format statements. See Figures 2-6 through 2-11 for sample reports.

e. Output

The printing of the column headings for all six reports is controlled through this subroutine.

f. Interfaces

Called by: WRTTL

Calls to: None

g. Arguments

DSYNR - The report number (value of 1-6).

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.25 Program Description

a. Identification

Tape Processor - WRNMSG (INDX)

b. Functions

This subroutine will print a warning message for each of the following four conditions:

- Number 1 - CCT changes already in TAEDP.
- Number 2 - Character change quantity from CCT not translatable.
- Number 3 - SRC storage exceeded.
- Number 4 - LIN storage exceeded.

If the input parameter 'WRNPAS' (Warning Bypass) is set to 'NO', a warning condition will immediately abort the execution of the Tape Processor.

c. Input

Common blocks XCONTRL, XSRCTMP

d. Processing

The following messages are possible:

- "WARNING 1 - CCT CHANGES FOR SRC = xxxxxxxxxx, LIN = xxxxxxxx ALREADY EXIST"
This message is no longer utilized.
- "WARNING 2 - EQP CHG QTY FOR SRC = xxxxxxxxxx, LIN = xxxxxxxx NOT TRANSLATABLE"
This message is generated if the rightmost character of the CCT change amount cannot be translated from character to integer format.
- "WARNING 3 - SRC STORAGE EXCEEDED AT SRC = xxxxxxxxxx"
This message is generated if the number of SRC's read from the CCT exceeds 1,000.
- "WARNING 4 - LIN STORAGE EXCEEDED AT SRC = xxxxxxxxxx, LIN = xxxxxxxx"
This message is generated if more than 30 equipment changes are read for one SRC.

e. Output

The warning messages will be written to the printer.

f. Interfaces

Called by: CCTLST (3)(4)
 XIATE (2)

Calls to: None

g. Arguments

INDX - The warning message number (value of 1-4).

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.26 Program Description

a. Identification

Tape Processor - WRRCD (IFILE, *)

b. Functions

This subroutine writes a selected TAEDP record to the output file selected by the passed parameter. The record will be written either to the CCT Unit File, file 12, or the Activated Unit File, file 11.

c. Input

None.

d. Processing

WRRCD simply writes a 239-character TAEDP record to file 11 for new activations and writes to file 12 for units affected by CCT changes.

e. Output

Records are written to output files 11, Activated Unit File and file 12, CCT Unit Files. These files are the sole input files to the File Processor.

f. Interfaces

Called by: ANYSRC (12,*)
 CHKEQP (12,*)
 PIKNEW (11,*)

Calls to: None

g. Arguments

- IFILE - Value of 11 or 12 representing the unit number of the output file.
- A numbered return in the calling routine, represented by an asterisk.

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.27 Program Description

a. Identification

Tape Processor - WRTTL (DSYNR, NPAGE)

b. Functions

This subroutine prints the page header for each of the six reports generated by the Tape Processor.

c. Input

Common block XINPUT

d. Processing

WRTTL prints the page headings for each Tape Processor report. Reports 1-5 are written to Unit #6 and Report #6 is written to Unit #16. The subroutine WRHDG is called to print the column heading after the page heading has been printed. The system function ADATE is used to return the current date and time.

e. Output

The printing of report headings for all six reports is performed by this subroutine.

f. Interfaces

Called by: DSYCTL

Calls to: WRHDG (report number)

g. Arguments

- DSYNR - The report number (value of 1-6).
- NPAGE - The page number.

h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.4.28 Program Description

a. Identification

Tape Processor - XLATE (CHGNRS, CHGLTR, ICHG, *)

b. Functions

This subroutine translates the least significant digit of the CCT equipment change quantity from character format to integer format and computes the overall change value, including the sign.

c. Input

Common block XSRCNT

d. Processing

The processing of XLATE is described as follows:

The change amount (CHGNRS) and change letter (CHGLTR) are passed to this subroutine. The change letter is converted as follows:

- A value of # through 9 remains as shown.
- A value of J through R is converted to 10 through 19, respectively.

The change letter value, once converted, is added to the change amount and returned to the calling subroutine in the parameter ICHG.

e. Output

. None.

f. Interfaces

Called by: CCTLST

Calls to: None

g. Arguments

- CHGNRS - The change amount to be translated.
- CHGLTR - The last significant digit before translation.
- ICHG - The last significant digit after translation.
- A numbered return in the calling routine, represented by an asterisk.

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h. Tables and Items

Please refer to Table 2-2 for the Data Dictionary.

2.5 Program Description - File Processor

Subsection 2.5 will contain a description of the main program for the File Processor and the 23 associated subroutines. A complete listing of the programs to be discussed in Subsection 2.5 is contained below.

<u>Paragraph Number</u>	<u>Program Name</u>
2.5.1	MAIN
2.5.2	ACCUM
2.5.3	CNTLVL
2.5.4	CNTRCD
2.5.5	DECODE
2.5.6	DSYCTL
2.5.7	DSYSM1
2.5.8	DSYSM2
2.5.9	LOADA
2.5.10	LOADB
2.5.11	LOADBØ
2.5.12	LOADC
2.5.13	LOADNA
2.5.14	LOADT
2.5.15	PAGADV
2.5.16	RDRCD
2.5.17	SRTMRG
2.5.18	TSTSET
2.5.19	TSTUNT
2.5.20	WRHDG
2.5.21	WRRCD
2.5.22	WRSKP
2.5.23	WRTTL
2.5.24	XLATE

A set of figures and tables is provided to assist the reader in understanding the internal logic of the model. The exhibits begin with a flow diagram of the File Processor to provide a general understanding of the system. Other exhibits which follow are meant to provide a more detailed picture of the logic of the individual data elements and routines. A description of the purpose of each exhibit is presented below in the same sequence as the exhibit appears in this subsection.

Figure 2-12. File Processor Flow Diagram

It is recommended that the flow diagram be used as the starting point for the first time reader in understanding the logic of this processor. An attempt has been made to highlight the major functions performed and explain them in such a manner that a reader totally unfamiliar with the system could understand. The subsections of 2.1, System Description, and 2.3, General Description, should be read first to obtain an introduction to the purpose of the File Processor. The flow diagram is annotated with subroutine names wherever possible in order to link the overall logic of the processor with the individual functions of each routine.

Figure 2-13. Common Block Cross-Reference (File Processor)

The majority of information is passed between routines via common blocks. This figure should assist the reader in understanding which data elements, or blocks of elements, are used in which routines. This should be especially useful when trying to trace an individual element throughout the entire processor, or in cases where a new common block variable is added. If a new variable is added to a common block, this table will show immediately which routines will have access to the new variable.

Table 2-3. Common Block Dictionary (File Processor)

The Common Block Dictionary identifies the individual arrays or variables defined within each common block. This table will serve as a useful tool in tracing a specific data element throughout the processor. The Data Dictionary, described on the following page, is also useful in describing the function and usage of each common block element.

Figure 2-14. Program Unit Hierarchy (File Processor)

This figure shows the structure of all the routines within the File Processor. The processor is comprised of one main program and a series of subroutines all of which are controlled, directly or indirectly, by the main program. This chart shows how the processor flows from the main program through each of the subroutines. Figure 2-14, along with Figure 2-15, allows the reader to see which routines are called by other routines, rather than by the main program.

Figure 2-15. Subroutine Cross-Reference (File Processor)

The subroutine cross-reference provides an explanation of which routines control the processing of other routines. On the vertical axis (side of page), the calling (controlling) routines are shown. The routines called are shown on the horizontal axis (top of page). A dot in the appropriate column links the called routine with the controlling routine.

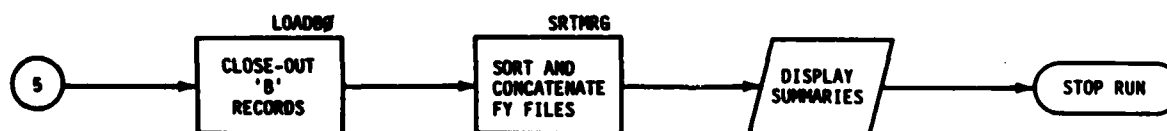
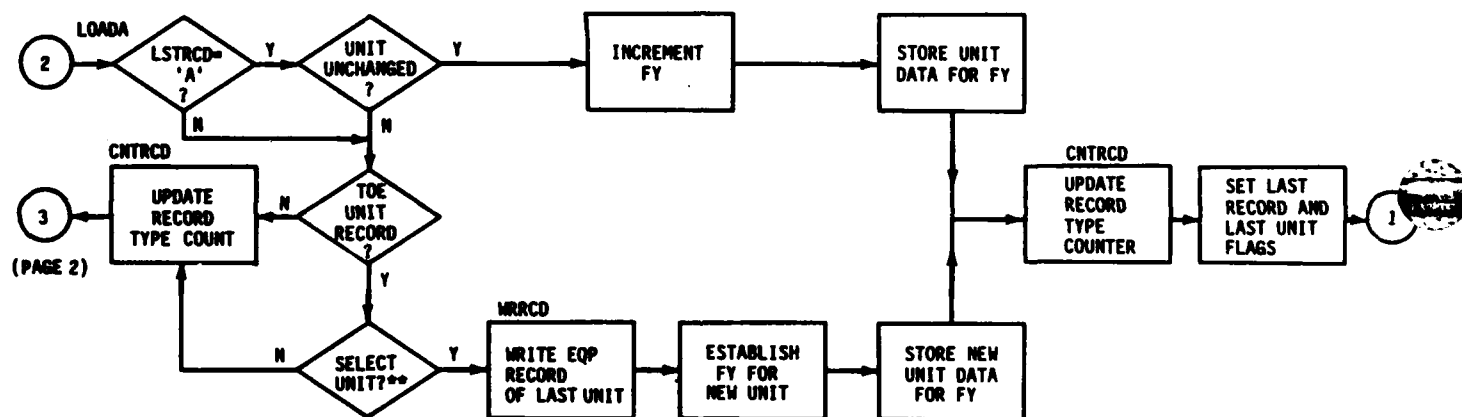
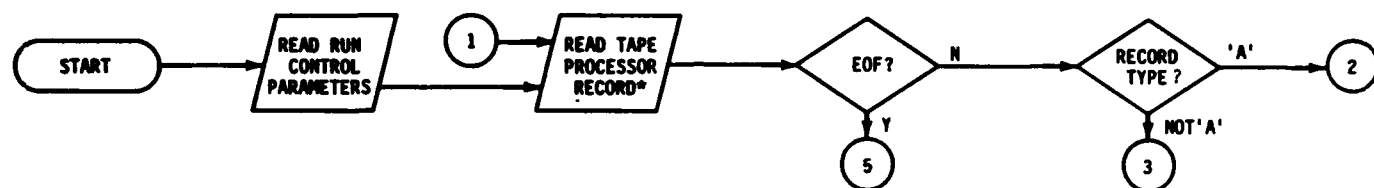
Table 2-4. Data Dictionary (File Processor)

This table provides a description of every common block element in the File Processor. This listing includes both variables and arrays and describes the size, format, uses and purpose of each data element. This table should be used as the main reference for information on the purpose, or other characteristics, of a data element.

Figures 2-16 through 2-17, Report Layouts (File Processor)

These figures provide a layout of the reports produced by the File Processor. These figures will be referenced within individual program descriptions wherever applicable and provide further information on the format and content of each report.

All of the above figures and tables are referenced throughout this subsection. They have all been placed at the front of the section for ease of reference.



*ACTIVATED UNIT FILE IF DTASET = MEMUNT : CCT UNIT FILE IF DTASET = CCTUNT

**SELECT BASED ON EDATE IF DTASET = MEMUNT
SELECT BASED ON MACOM IF DTASET = CCTUNT

Figure 2-12. File Processor Flow Diagram
(page 1 of 2 pages)

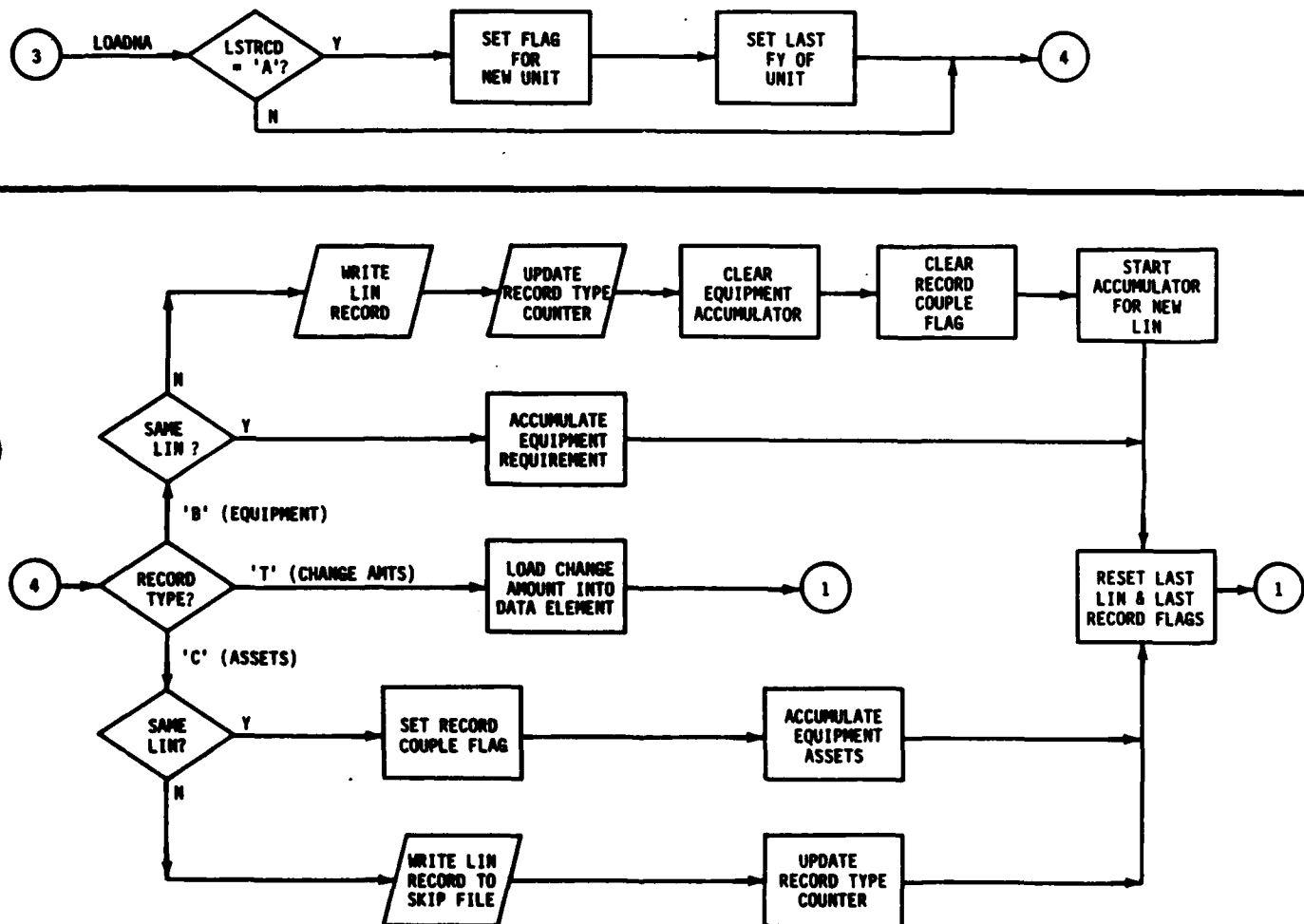


Figure 2-12. File Processor Flow Diagram
(page 2 of 2 pages)

Table 2-3. Common Block Dictionary (File Processor)

<u>COMMON BLOCK VARIABLE</u>	<u>VARIABLES</u>
XASTDTA	UICC, LINC, NSNM, IPROJ, CPROJ, CUMPRJ
XCONTRL	LTR, CTLLVL, SKPVLV, LSTRCD, LSTLIN, IUNT, TYPUNT, ACTYR, IFY, IALL, RDCPL, CURLIN, NEWSSET, CMD, CMDSET
XINPUT	EDATE, FRSTFY, DTADTE, NFYSET, RUNCLS, CCTID, DTASET, CMDPIK
XRCD	RECORD
XRMDTA	UICB, LIN, LINNM, ERC, PACR, ACFT, IREQD, CREQD, IAUTH, CAUTH, ERCFY, CUMQD, CUMATH, ICHG
XSUMVL	TOEFLD, NONSKP, TOESKP, AUGSKP, TDA SKP, POMSKP
XSUMRCD	IA, IBC, IB, IC, TOEUC, TOEBR, TOENM
XUNTDTA	UIC, UBR, UNAME, NFY, UDAMPL, UMACOM, USRC, IEDATE, ILDATE, UALO, UALOFY, USCRFY, UDAMFY, UMACFY

NOTE: Refer to Table 2-4 for additional information on File Processor variables.

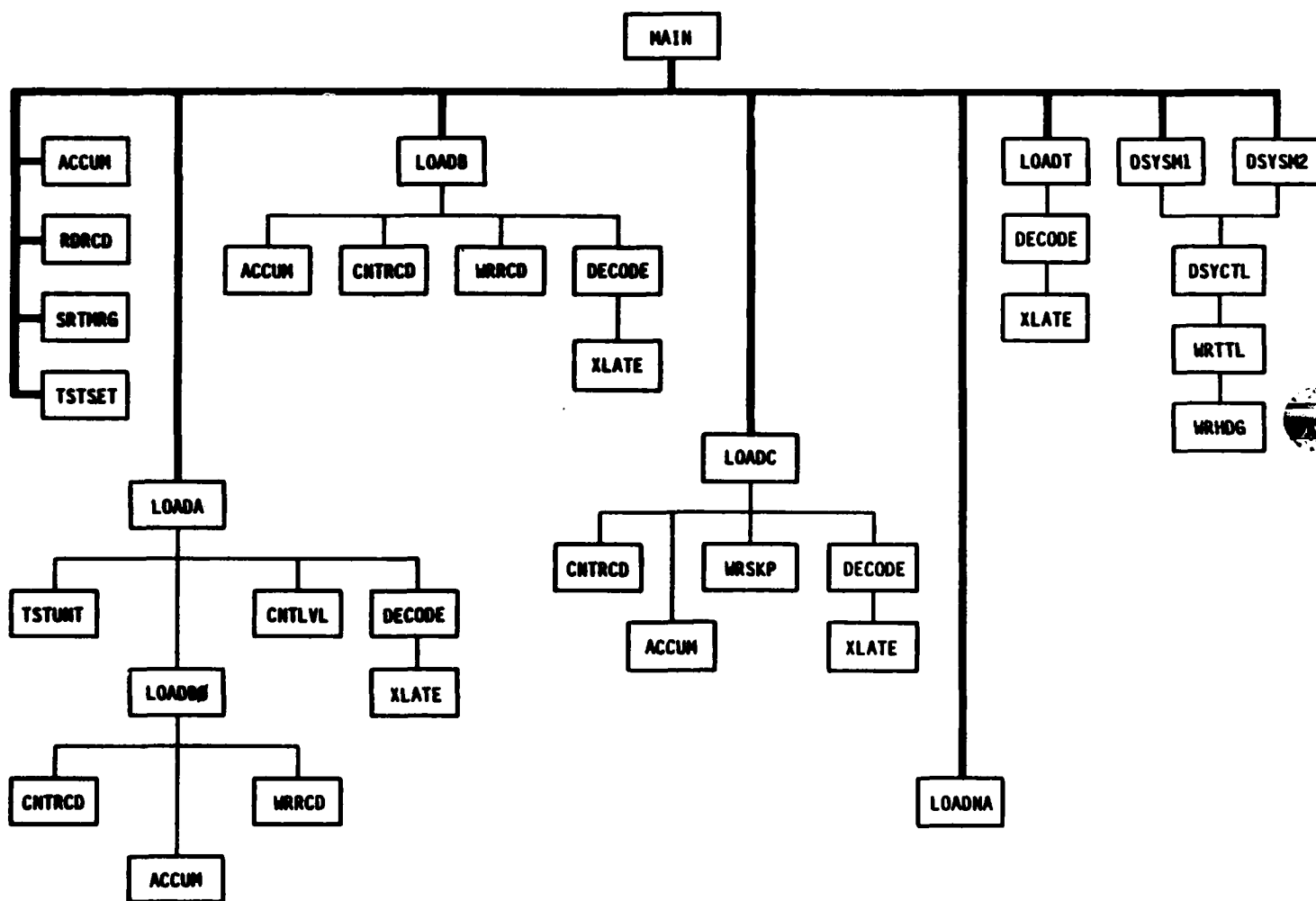


Figure 2-14. Program Unit Hierarchy (File Processor)

	CALLED ROUTINE																			
	ACCUM	CNTLVL	CNTRCD	DECODE	DSYCTL	DSYSM1	DSYSM2	LOADA	LOADB	LOADB0	LOADC	LOADNA	LOADT	MAIN	PAGADV	RDRCD	SRTMRG	TSTSET	TSTUNT	WRHDG
CALLING ROUTINE	ACCUM	/																		
	CNTLVL	/																		
	CNTRCD		/																	
	DECODE			/																
	DSYCTL				/															
	DSYSM1				•	/														
	DSYSM2				•		/													
	LOADA		•	•				/		•									•	
	LOADB	•		•	•				/											•
	LOADB0	•		•						/										•
	LOADC	•		•							/									•
	LOADNA											/								
	LOADT			•									/							
	MAIN	•				•	•	•	•	•	•	•	•	/	•	•	•	•		
	PAGADV														/					
	RDRCD															/				
	SRTMRG																/			
	TSTSET																	/		
	TSTUNT																		/	
	WRHDG																			/
	WRRCD																			
	WRSKP																			
	WRTTL																		•	/
	XLATE																			/

Figure 2-15. Subroutine Cross-Reference (File Processor)

Table 2-4. Data Dictionary - File Processor
(page 1 of 7 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
ACFT	DECODE(I) * WRRCD(P)	N/A	I1	Indicates whether an item is aircraft.
ACTYR	RDRCD(I) * TSTUNT(P)	N/A	I2	The unit's FY from the A-record.
AUGSKP	CNTLVL(P) * DSYSM1(P,0)	N/A	I4	Count of augmented units skipped.
CAUTH	DECODE(I) (P) *	7	A1	Last character of authorized quantity for each Fiscal Year.
CCTID	MAIN(I) * WRHDG(O)	N/A	A6	The CCT identifier to be displayed.
CMD	RDRCD(I) * TSTUNT(P)	N/A	A3	The MACOM of the unit.
CMDPIK	MAIN(I) * TSTUNT(P) WRHDG(O)	13	A3	The 'yes' or 'no' paramaters used to select units for each of 13 MACOM's.
CMDSET	TSTUNT(P) * WRHDG(O)	13	A3	The 13 MACOM abbreviations, in processing order.
CPROJ	DECODE(I) *	7	A1	Last character of projected quantity for each Fiscal Year.
CREQD	DECODE(I) *	7	A1	Last character of required quantity for each Fiscal Year.
CTLLVL	LOADA(P) MAIN(P) RDRCD(I) *	N/A	A6	The unit ID from the TAEDP.

Table 2-4. Data Dictionary - File Processor
(page 2 of 7 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
CUMATH	ACCUM(P) * STRMRG(I,O) WRRCD(O)	7	I	Accumulated amount of authorized equipment for a LIN.
CUMPRJ	ACCUM(P) SRIMRG(I,O) * WRRCD(O)	7	I	Accumulated amount of projected equipment for a LIN.
CUMROD	ACCUM(P) * SRIMRG(I,O) WRRCD(O)	7	I	Accumulated amount of required equipment for a LIN.
CURLIN	LOADB(P) RDRCD(P) *	N/A	A6	The current LIN identifier.
DTADTE	MAIN(I) * WRTTL(O)	N/A	A8	The TAEDP run date (MM/DD/YY).
DTASET	MAIN(I) * TSTSET(P) TSTUNT(P) WRHDG(P) WRTTL(P)	N/A	A6	The file to be processed; either 'CCTUNT' or 'NEWUNT'.
EDATE	MAIN(I) * TSTUNT(P) WRHDG(O)	N/A	I2	Unit activation year of interest.
ERC	CNTRCD(P) DECODE(I,P) *	N/A	A1	Item equipment readiness code.
ERCFY	ACCUM(P) DECODE(P) * SRIMRG(I,O) WRRCD(O)	7	A1	The ERC of a LIN for each FY.
FRSTFY	LOADA(P) MAIN(I,P) *	N/A	I2	First year of planning period.

Table 2-4. Data Dictionary - File Processor
(page 3 of 7 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
IA	CNTRCD(P)* DSYSM2(O)	400	I	Total number of A-records for each unit (max 400).
IALL	CNTLVL(P)* XLATE(O)	N/A	I4	Count of all units processed.
IAUTH	ACCUM(P) DECODE(I)*	7	I	Item authorized quantity for each Fiscal Year.
IB	CNTRCD(P)* DSYSM2(P,O)	(400x3)	I	Total number of B-records for each unit, (max 400), by ERC level (A, B, or C).
IBC	CNTRCD(P)* DSYSM2(P,O)	(400x3)	I	Total number of B-record, C-record pairs for each unit, (max 400), by ERC level (A, B, C).
IC	CNTRCD(P)* DSYSM2(O)	400	I	Total number of C-records for each unit (max 400).
ICHG	ACCUM(P) DECODE(I)* SRIMRG(I,O) WRRCD(O)	7	I	Item change amount for each Fiscal Year.
IEDATE	LOADA(P)* WRRCD(P)	N/A	I2	Index value of initial Fiscal Year of unit.
IFY	LOADA(P)* LOADNA(P)	N/A	I2	Fiscal year index (1-7).
ILDATE	LOADA(P)* LOADNA(P) WRRCD(P)	N/A	I2	Unit termination date as assigned. Index value of final Fiscal Year of unit.
IPROJ	ACCUM(P) DECODE(I)* WRSKP(O)	7	I	Item projected on-hand quantity for each Fiscal Year.

Table 2-4. Data Dictionary - File Processor
(page 4 of 7 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
IREQD	ACCUM(P) DECODE(I,P)*	7	I	Item required quantity for each Fiscal Year.
IUNT	CNTLVL(P) CNTRCD(P) LOADA(P)* SRTMRG(I,O) WRRCD(O)	N/A	I4	Count of TOE units processed.
LIN	DECODE(I)* LOADB(P) SRTMRG(I,O) WRRCD(O) XLATE(O)	N/A	A6	Item identification code.
LINC	DECODE(I)* LOADC(P) WRSKP(O) XLATE(O)	N/A	A6	C-record item identifier.
LINM	DECODE(I)* SRTMRG(I,O) WRRCD(O)	N/A	A22	Item name on B-record.
LSTLIN	LOADB(P)* LOADC(P)* MAIN(P)	N/A	A6	Item code on previous record.
LSTRCD	LOADA(P)* LOADB(P) LOADC(P) LOADNA(P) MAIN(P)	N/A	A1	The record type of previous record.
LTR	MAIN(P) RDRCD(I)*	N/A	A1	Record letter of current record.
NEWSET	LOADB(P)* LOADNA(P)* MAIN(P)	N/A	A1	Flag to indicate first B-record of a unit.

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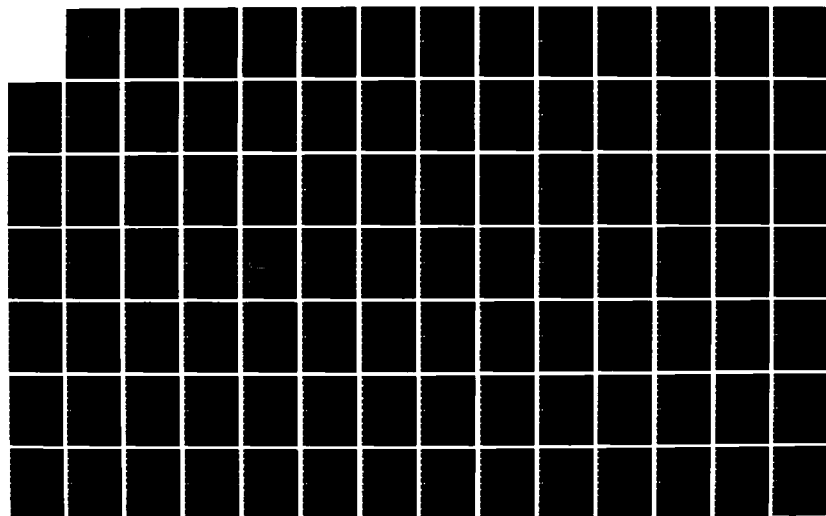
EFFECTIVE DATE (E-DATE) MODEL DOCUMENTATION VOLUME 4
PROGRAM MAINTENANCE MANUAL(U) TECHNASSOCIATES INC
ROCKVILLE MD W T HARKEY ET AL. OCT 83 CAA-D-83-3-VOL-4
MDA903-83-C-0277

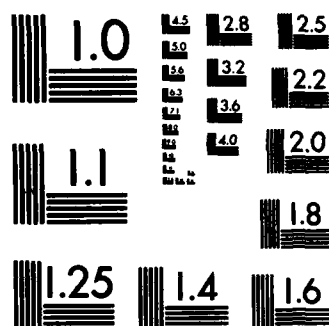
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Table 2-4. Data Dictionary - File Processor
(page 5 of 7 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
NFY	DECODE(I)* LOADA(P) LOADNA(P)	N/A	I2	Fiscal Year on current A-record.
NFYSET	LOADA(P) LOADNA(P) MAIN(P)* SRTMRG(I,O) WRRCD(O)	7	I	The seven fiscal years of the planning period, expressed as the last two digits of the year.
NONSKP	CNTLVL(P)* DSYSM1(P,O)	N/A	I4	Count of non-items skipped.
NSNM	DECODE(I)* WRSKP(O)	N/A	A22	C-record item name.
PACR	DECODE(I)* WRRCD(P)	7	I	The pacing indicator for each fiscal year, added to the B-record by the LEA.
POMSKP	CNTLVL(P)* DSYSM1(P,O)	N/A	I4	Count of POMCUS units skipped.
RCDCPL	LOADB(P) LOADBO(P) LOADC(P)* MAIN(P)	N/A	I1	Flag for B-record, C-record pairings (0-not paired, 1-paired).
RECORD	DECODE(I) RDRCD(I)* TSTSET(P)	N/A	A239	TAEDP record from Tape Processor.
RUNCLS	MAIN(I)* WRTTL(O)	N/A	A12	Run classification (spelled out).
SKPLVL	LOADA(P)* MAIN(P)	N/A	A6	ID of unit to be skipped.
TDA SKP	CNTLVL(P)* DSYSM1(P,O)	N/A	I4	Count of TDA units skipped.

Table 2-4. Data Dictionary - File Processor
(page 6 of 7 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
TOEBR	CNTLVL(P)* DSYSM2(O)	400	A2	Unit branch of filed unit (max 400).
TOEFLD	CNTLVL(P)* DSYSM1(P,O) DSYSM2(P)	N/A	I4	Count of TOE units output.
TOENM	CNTLVL(P)* DSYSM2(O)	400	A21	Unit name of filed unit (max 400).
TOESKP	CNTLVL(P)* DSYSM1(P,O)	N/A	I4	Count of TOE units skipped.
TOEUIC	CNTLVL(P)* DSYSM2(O)	400	A6	Unit ID of filed unit (max 400).
TYPUNT	LOADA(P) RDRCD(I)*	N/A	I1	A-record unit type.
UALO	DECODE(I)* SRTMRG(I,O) WRRCD(O)	N/A	I1	Unit Authorized Level of Organization.
UBR	CNTLVL(P) DECODE(I)* SRTMRG(I,O) WRRCD(O)	N/A	A2	Unit Branch.
UDAMPL	DECODE(I)* SRTMRG(I,O) WRRCD(O)	N/A	I5	Unit DAMPL (priority).
UIC	CNTLVL(P) DECODE(I)* SRTMRG(I,O) WRRCD(O)	N/A	A6	Unit ID code (A-record).
UICB	DECODE(I)* XLATE(O)	N/A	A6	Unit ID code (B-record).

Table 2-4. Data Dictionary - File Processor
(page 7 of 7 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
UICC	DECODE(I)* WRSKP(O) XLATE(O)	N/A	A6	Unit ID code (C-record).
UMACOM	DECODE(I)* SRIMRG(I,O) WRRCD(O)	N/A	I2	Unit Command.
UNAME	CNTLVL(P) DECODE(I)* SRIMRG(I,O) WRRCD(O)	N/A	A21	Unit Name.
USRC	DECODE(I)* SRIMRG(I,O) WRRCD(O)	N/A	A9	Unit SRC.

Note: The letter (P, I, O) next to the subroutine names denotes the usage of the table as follows:

- (P) - processing
- (I) - input
- (O) - output

* An asterisk occurring to the right of the routine name indicates that the table is originated by that routine.

Note: The letter (A, I) in the format column of the table denotes the array characteristics as follows:

- (A) - alphanumeric
- (I) - integer

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EDATE MODEL
DISPLAY FP-NEW-1FILE PROCESSOR
UNIT SUMMARYPAGE 1
DATA DATE: TESTDATA
REPT DATE: 07/25/83

***** UNCLASSIFIED *****

UNITS ACTIVATED IN FY 82

TOTAL UNITS	TOTAL TOE	TOTAL NON	TOTAL TOE	TOTAL AUG TOE	TOTAL TDA	TOTAL POM
READ	FILED	SKIPPED	SKIPPED	SKIPPED	SKIPPED	SKIPPED
19	3	0	16	0	0	0

Figure 2-16. Report #1, File Processor Unit Summary

2.5.1 Program Description

a. Identification

File Processor - MAIN

b. Functions

This program controls the processing of the File Processor. The functions performed include reading the Run Control Parameters input by the user, reading the files produced by the Tape Processor, processing the records and writing them to seven fiscal year files. At the end of the process, the files are sorted and concatenated to a single file.

c. Input

This program requires the following files as inputs:

- Run Control Parameter Files; Unit #2.
 - New Activation Run (MTOE*FP1CTL01).
 - CCT Run (MTOE*FP1CTL02).
- Activated Unit File (MTOE*TP1NEW40); Unit #7
- CCT Unit File (MTOE*TP1CCT00); Unit #7
- Common blocks XCONTRL, XINPUT.

Note: More detailed information on these files is contained in subsection 3.3, Data Base.

d. Processing

The processing of MAIN is described as follows:

- Begin File Processor.
- Read user-input Run Control Parameters (Unit #2) for dataset selection, first fiscal year, data creation date and run classification.
- If 'NEWUNT' data file is selected, read the next record from Unit #2 for the EDATE;
Else, if 'CCTUNT' data file is selected, read the CCTID and the 'YES' or 'NO' values for each of the 13 MACOM's (Major Command);
Else, abort processing due to invalid parameter.
- Read the TAEDP record from the selected file.
- If first read, check positions 13 or 14 to verify file.
- If record not a TOE unit (type = 1) skip record.
- If record type (position 34) = 'A' then call LOADA else call LOADNA. If LOADA is called, no further processing will take place for this record. All of

the commands found below up until the report summaries are only applicable for non 'A' records.

- If record type = 'B' call LOADB.
- If record type = 'C' call LOADC.
- If record type = 'T' call LOADT.
- Call LOADB\$ to complete processing of a 'B' record for the last record on the file.
- Call STRMRG to sort seven fiscal year files into one output file.
- Call DSYSM1 and DSYSM2 to produce summary reports.

e. Output

The following outputs are produced by the File Processor:

- Report #1, File Processor Unit Summary; refer to Figure 2-16 for sample.
- Report #2, File Processor TAEDP Record Summary; refer to Figure 2-17 for sample.
- Selected Units File
 - CCT File (MTOEFP1PIK4\$)
 - New Activation (MTOE*FP1PIK41)
- Skipped Items File
 - CCT File (MTOE*FP1SKP4\$)
 - New Activation (MTOE*FP1SKP41)

f. Interfaces

Called by: None.

Calls to: ACCUM (\$)
 DSYSM1
 DSYSM2
 LOADA (*)
 LOADB (*)
 LOADC (*)
 LOADNA (*)
 LOADT (*)
 PAGADV
 RDRCD (*)
 SRTMRG
 TSTSET

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.2 Program Description

a. Identification

File Processor - ACCUM (INDX)

b. Functions

This subroutine accumulates the requirements data from the B-records and the assets data from the C-records into tables for each LIN by fiscal year.

c. Input

Common blocks XASTDTA, XRQMDTA

d. Processing

The processing of ACCUM is described as follows:

- If INDX = 0, then clear out all tables to zero.
- If INDX = 1, then return.
- If INDX = 2, then accumulate requirements data:
 - Accumulate the quantity of equipment required for all seven years into CUMRQD(I).
 - Accumulate the quantity of equipment authorized for all seven years into CUMATH(I).
- If INDX = 3, then accumulate all asset data (IPROJ) from the C-record, for all seven years into the CUMPRJ table.

e. Output

None.

f. Interfaces

Called by: LOADB
LOADB\$
LOADC
MAIN

Calls to: None

g. Arguments

INDX - A designation of the record type, assists in tracking record placement within a unit.

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h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.3 Program Description

a. Identification

File Processor - CNTLVL (ITYPE)

b. Functions

This subroutine counts the number of TOE units, augmented TOE units and TDA units read from the Tape Processor file. An argument is passed to this subroutine for the unit type. The function of this subroutine is similar to the subroutine of the same name in the Tape Processor.

c. Input

Common blocks XCONTRL, XSUMLVL, XSUMRCD, XUNTDTA

d. Processing

The processing of CNTLVL is described as follows:

- If unit type = 0, add 1 to non-units skipped.
- If unit type = 1, add 1 to TOE units skipped.
- If unit type = 2, add 1 to augmented units skipped.
- If unit type = 3, add 1 to TDA units skipped.
- If unit type = 4, add 1 to POMCUS units skipped.
- If unit type = 5:
 - Add 1 to TOE units filed.
 - Store unit ID in TOEUIC table.
 - Store BR unit identifier in TOEBR table.
 - Store unit name in TOENM table.

All of the above three tables are indexed by the subscript IUNT set in the LOADA routine.

e. Output

None.

f. Interfaces

Called by: LOADA (TYPUNT)(5)(1)

Calls to: None

g. Arguments

ITYPE - The unit type of the Tape Processor TAEDP record.

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h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.4 Program Description

a. Identification

File Processor - CNTRCD (ITYPE)

b. Functions

This subroutine counts the number of 'A,' 'B,' and 'B with C' records filed as well as the number of 'C' records skipped for each TOE unit processed.

c. Input

Common blocks XCONTRL, XRQMDTA, XSUMRCD

d. Processing

The processing of CNTRCD is described as follows:

- If ITYPE = 1, add 1 to A-records filed.
 - If ITYPE = 2, add 1 to B and C combinations filed.
 - If ITYPE = 3, add 1 to B-records filed.
 - If ITYPE = 4, add 1 to C-records skipped.
- (All of the above tables are subscripted by ERC within unit index.)

e. Output

None.

f. Interfaces

Called by: LOADA (1)
 LOADB (2)(3)
 LOADBØ (2)(3)
 LOADC (4)

Calls to: None

g. Arguments

ITYPE - The unit type of the Tape Processor TAEDP record.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.5 Program Description

a. Identification

File Processor - DECODE (ITYPE)

b. Functions

This subroutine utilizes the FORTRAN command DECODE to move certain positions of either the A, B, C, or T record into common block variables or tables.

c. Input

Common blocks XASTDTA, XRCD, XRQMDTA, XUNTDTA

d. Processing

The processing of DECODE is described as follows:

- If ITYPE = 1, extract the following fields from the A-record:
 - UIC (Unit ID): positions 1-6.
 - UMACOM (Major Command): positions 7-12.
 - NFY (Fiscal Year): positions 46-47.
 - UDAMPL (Priority): positions 65-69.
 - UNAME (Unit Name): positions 124-144.
 - UBR (Branch Number): positions 166-167.
 - USRC (Standard Requirements Code): positions 185-193.
 - UALO (Authorized Level of Organization): position 194.

Return.

- If ITYPE = 2, extract the following fields from the B-records:
 - UICB (Unit ID): positions 1-6.
 - LIN (Equipment ID): positions 13-18.
 - ERC (Equipment Readiness Code): position 21.
 - PACR (Pacing Identifiers): positions 22-28.
 - ACFT (Aircraft Identification): position 29.
 - LINNM (Equipment Name): positions 36-57.
 - IREQD (Quantity of LIN Required):
positions 63-65.
 - CREQD (Last position of IREQD):
position 66.
 - IAUTH (Quantity of LIN authorized):
positions 70-72.
 - CAUTH (Last position of IAUTH):
position 73.

occurs
7 times
in same
sequence

- Return.

Note: XLATE is called to convert IREQD and IAUTH. If amount required for each year is greater than zero, the ERC is preserved in a table indexed by year.

- If ITYPE = 3, extract the following C-record fields:
 - UICC (Unit ID): positions 1-6.
 - LINC (Equipment ID): positions 13-18.
 - NSNNM (Equipment Name): positions 36-57.
 - IPROJ (Amount Projected): positions 121-123. (occurs
 - CPROJ (Last position of IPROJ): position 124. 7 times)
- Return
- If ITYPE = 4, extract the seven CCT change amounts from the T-record. Return.

e. Output

None.

f. Interfaces

Called by: LOADA (1)
LOADB (2)
LOADC (3)
LCADT (4)

g. Arguments

ITYPE - The unit type of the Tape Processor TAEDP record.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.6 Program Description

a. Identification

File Processor - DSYCTL (DSYNR)

b. Functions

This subroutine controls the formatting of the detail lines in the two reports generated by the File Processor. The lines are grouped into blocks, and the number of lines per block and the number of blocks per page are established separately for each report.

c. Input

None.

d. Processing

The processing of DSYCTL is described as follows:

- If the report number has changed since the previous call, print the headers for the first page of the report. Return.
- Group the lines into blocks and skip a line between each block.
- Group the blocks on the page and write a new page when the maximum number of blocks has been written.
- Return.

e. Output

Calls WRTTL to print the report headers.

f. Interfaces

Called by: DSYSM1 (1)
 DSYSM2 (2)

Calls to: WRTTL (report number)

g. Arguments

DSYNR - The report number (values of 1-4).

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.7 Program Description

a. Identification

File Processor - DSYSM1

b. Functions

This subroutine displays the results of the File Processor by showing summary totals of the units processed.

c. Input

Common block XSUMLVL

d. Processing

The processing of DSYSM1 is described as follows:

- Compute the total number of units processed.
- Call DSYCTL(1) to print the page header.
- Write the totals of all the counters accumulated in the subroutine CNTLVL.
- Return.

e. Output

Prints Report #1, File Processor Unit Summary.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (1)

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.8 Program Description

a. Identification

File Processor - DSYSM2

b. Functions

This subroutine displays the results of the File Processor by summarizing the requirements and assets records and comparing the counts of the two record types.

c. Input

Common blocks XSUMLVL, XSUMRCD

d. Processing

The processing of DSYSM2 is described as follows:

- For each unit:
 - Compute ITOTA as the total number of items where the ERC = A.
 - Compute ITOTB as the total number of items where the ERC = B.
 - Compute PCTA as the percentage of the requirements records filed which also had an assets record for ERC = A.
 - Compute PCTB as the same as PCTA for an ERC = B.
 - Write the unit ID, unit BR, unit name, total A-records, total B with C-records, total B-records and percentage computed above for each ERC.

e. Output

Prints Report #2, File Processor TAEDP Record Summary.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (2)

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.9 Program Description

a. Identification

File Processor - LOADA (*)

b. Functions

This subroutine controls the processing of all of the A-records from the Tape Processor output file.

c. Input

Common blocks XCONTRL, XINPUT, XUNTDTA

d. Processing

The processing of LOADA is described as follows:

- If record is part of current A-record set:
 - If unit ID is the same as previous record (i.e., consider the case of two sets of A-records following each other with no B- or C-records):
 - Call DECODE(1) for A-record extract.
 - Call CNTRCD(1) to increment record counters.
 - Return 1.
 - Else, if unit ID has changed, close out processing of previous A-record set and start processing new set as in LOADNA case.
- If unit ID is not '1', skip unit and return.
- Call TSTUNT to check if the unit is to be selected. If selected, then return, else, return 1.
- If unit selected:
 - Call LOADB% to close out uncompleted B-records.
 - Call DECODE(1) for A-record extract.
 - Call CNTLVL(5) and CNTRCD(1).
 - Return 1.
- If unit not selected:
 - Call CNTLVL(1).
 - Return 1.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: CNTLVL (TYPUNT)(5)(1).
CNTRCD (1)
DECODE (1)
LOADBG
TSTUNT (*, *)

g. Arguments

* - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.10 Program Description

a. Identification

File Processor - LOADB (*)

b. Functions

This subroutine controls the processing of all of the B-records from the Tape Processor output file.

c. Input

Common blocks XCONTRL, XRQMDTA

d. Processing

The processing of LOADB is described as follows:

- If present B-record is for same LIN as previous record:
 - Call DECODE(2) to extract fields for B-record.
 - Call ACCUM(2) to accumulate requirements data.
 - Return 1.
- Present record is now for a new LIN.
- Call WRRCD to write the record for the previous LIN.
- If last LIN had requirements and assets records, then call CNTRCD(2).
- If last LIN had only a requirements record, then call CNTRCD(3).
- Call DECODE(2) and ACCUM(2).
- Return 1.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: ACCUM (2)(Ø)
 CNTRCD (2)(3)
 DECODE (2)
 WRRCD

g. Arguments

* - Represents a numbered return in the calling routine.

CAA-D-83-3

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.11 Program Description

a. Identification

File Processor - LOADBØ

b. Functions

This subroutine completes the processing of records left unfinished due to the transition to a new set of unit records.

c. Input

Common block XCONTRL

d. Processing

The processing of LOADBØ is described as follows:

- If first call to LOADBØ, ignore and return.
- Call WRRCD to write the record for previous LIN.
- If last LIN had both requirements and assets records, call CNTRCD(2), else call CNTRCD(3).
- Return.

e. Output

None.

f. Interfaces

Called by: LOADA
MAIN

Calls to: ACCUM (Ø)
CNTRCD (2)(3)
WRRCD

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.12 Program Description

a. Identification

File Processor - LOADC (*)

b. Functions

This subroutine controls the processing of all of the C-records from the Tape Processor output file.

c. Input

Common blocks XASTDTA, XCONTRL

d. Processing

The processing of LOADC is described as follows:

- Call DECODE(3) to extract C-record fields.
- If LIN has not changed:
 - Set record couple flag (RDCPL) to 1.
 - Call ACCUM(3).
- If LIN has changed:
 - Call WRSKP to write this C-record to the Skipped Items File since no corresponding B-record exists.
 - Call CNTRCD(4).
- Return 1.

e. Output

Calls WRSKP to write a record to the Skipped Items File.

f. Interfaces

Called by: MAIN

Calls to: ACCUM (3)
CNTRCD (4)
DECODE (3)
WRSKP

g. Arguments

* - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.13 Program Description**a. Identification**

File Processor - LOADNA (*)

b. Functions

This subroutine is utilized to close out the processing of the seven A-records for each unit whenever the first B-record is reached.

c. Input

Common blocks XCONTRL, XINPUT, XUNTDTA

d. Processing

The processing of LOADNA is described as follows:

- If the previous record was non-A, return 1; else, set NEWSET=1 to initialized non-A string of records.
- If the last A-record was the final fiscal year, set ILDATE to 7 and return 1.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: None

g. Arguments

* - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.14 Program Description

a. Identification

File Processor - LOADT (*)

b. Functions

This subroutine controls the processing of the T-record containing the CCT change amounts. The routine DECODE is called to extract the amounts from the record and move them to tables.

c. Input

None.

d. Processing

The only statement in this subroutine is to call DECODE(4).

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: DECODE (4)

g. Arguments

* - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.15 Program Description

a. Identification

File Processor - PAGADV

b. Functions

This subroutine advances the printer to a new page after all of the File Processor reports have been written so that the termination messages will print on a separate page.

This subroutine is called by MAIN and contains only a carriage control command to advance the printer to a new page.

No other information is required for this subroutine.

2.5.16 Program Description

a. Identification

File Processor - RDRCD (*)

b. Functions

This subroutine reads and extracts information from the input file for all units to identify values utilized in record selection.

c. Input

- Reads the selected input file, either the Activated Unit File or the CCT Unit File, as Unit #7.
- Common blocks XCONTRL, XRCD.

d. Processing

- Read a TAEDP record of 239 characters.
- Extract the unit ID and letter (A, B, or C).
- If record type (letter) = A, then extract the values for command, fiscal year and unit type.
- If record type = B, extract the LIN value.
- Return.
- At EOF, return 1.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: None

g. Arguments

* - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.17 Program Description

a. Identification

File Processor - SRTMRG

b. Functions

This subroutine will sort the seven fiscal year files in inverse DAMPL (priority) sequence and concatenate them into one file. This sort will allow the units with the highest priority to be updated by the Assessment Processor first.

c. Input

- The sorted fiscal year file is temporarily saved on Unit #21 and is used as output from the sort and input to the Selected Units File, the File Processor output file.
- Common blocks XASTDTA, XCONTRL, XINPUT, XRQMDTA, XUNTDTA.

d. Processing

The processing of SRTMRG is described as follows:

- For each of the seven fiscal year files (Unit #11 through #17), execute FSORT to sort the file and write it to a temporary file on Unit #21. The sorting sequence of each fiscal year file is as follows:
 - Inverse DAMPL.
 - Ascending unit ID.
 - Ascending ERC.
 - Ascending equipment ID.
- Write the sorted, concatenated file to the File Processor output file (Unit #20).

e. Output

The Selected Units File is created.

f. Interfaces

Called by: MAIN

Calls to: FSORT (Fortran Sort Utility)

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.18 Program Description

a. Identification

File Processor - TSTSET

b. Functions

This subroutine will check either position 13 or position 14 of the input record for a value to correspond with the dataset run control parameter entered by the user.

c. Input

Common blocks XINPUT, XRCD

d. Processing

The processing of TSTSET is described as follows:

- If dataset is 'NEWUNT' position 13 must be 1.
- If dataset is 'CCTUNT' position 14 must be 1.
- If the above comparison is not true, then STOP RUN of File Processor.

e. Output

None.

f. Interfaces

Called by: MAIN

Calls to: None

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.19 Program Description

a. Identification

File Processor - TSTUNT (*, *)

b. Functions

This subroutine controls the selection of the input records based on the input parameter value selected by the user.

c. Input

Common blocks XCONTRL, XINPUT

d. Processing

The processing of TSTUNT is described as follows:

- If dataset is 'NEWUNT' and fiscal year of first A-record = user-input EDATE then return 1 to symbolize selection; else, return 2 to symbolize rejection of record.
- If dataset is 'CCTUNT' and the command (MACOM) specified on the record is flagged as 'YES' in the Run Control Parameter file then return 1, else return 2.

e. Output

None.

f. Interfaces

Called by: LOADA

Calls to: None

g. Arguments

The two asterisks represent numbered returns in the calling routine.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.20 Program Description

a. Identification

File Processor - WRHDG (DSYNR)

b. Functions

This subroutine writes the column headings for the report specified in the argument passed.

c. Input

Common blocks XCONTRL, XINPUT

d. Processing

The processing of WRHDG is described as follows:

- If the Activated Unit File is used, then print the effective date (EDATE).
- If the CCT Unit File is used, then print the 13 command (MACOM) parameters.
- If report number (DSYNR) = 1, write the column headings for the Unit Summary report; else, if report number = 2, write the column heading for the TAEDP Record Summary report.

e. Output

This routine prints the column headings for the two File Processor reports, the Unit Summary and the TAEDP Record Summary.

f. Interfaces

Called by: WRTTL

Calls to: None

g. Arguments

DSYNR - The report number (value of 1-4).

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.21 Program Description

a. Identification

File Processor - WRRCD

b. Functions

This subroutine writes combined A-record and B-record data to a set of fiscal year files. The data items particular to each year are indexed by the fiscal year (I). These files are later sorted and combined into one file in the subroutine SRTMRG.

c. Input

Common blocks XASTDTA, XCONTRL, XINPUT, XRQMDTA, XUNTDTA

d. Processing

The processing of WRRCD is described as follows:

- For fiscal year index range (normally 1 through 7):
Write the individual file record for the current indexed year. This record is composed of both unit items from the A-record and the individual LIN items from the B-records for that LIN.

e. Output

Seven temporary fiscal year files (numbers 11 through 17) are created by this routine. In SRTMRG these seven files are merged into one output file, the Selected Units File.

See Section 3.3, Data Base for further information on the format of the file.

f. Interfaces

Called by: LOADB
LOADBØ

Calls to: None

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.22 Program Description

a. Identification

File Processor - WRSKP

b. Functions

This subroutine writes C-records to a separate file in those instances where there was no corresponding B-records. The subroutine WRUNT is used to write a unit information record to this file to be associated with the C-record.

c. Input

Common block XASTDTA

d. Processing

The sole function of WRSKP is to write a record to file #10. This record contains the unit ID, equipment ID, equipment name and projected amounts of equipment.

e. Output

This routine writes a record to file #10 (69 characters in length).

f. Interfaces

Called by: LOADC

Calls to: None

g. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.23 Program Description

a. Identification

File Processor - WRTTL (DSYNR, NPAGE)

b. Functions

This subroutine prints the header of each File Processor report.

c. Input

Common block XINPUT

d. Processing

The processing of WRTTL is described as follows:

- Write the run classification entered as a Run Control Parameter at the bottom of each page.
- Write the report header for the appropriate dataset used and the report number requested.

e. Output

This routine prints the page headings and footings on all File Processor reports.

f. Interfaces

Called by: DSYCTL

Calls to: WRHDG (report number)

g. Arguments

- DSYNR - The report number (value of 1-4).
- NPAGE - The page number of the report.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.5.24 Program Description

a. Identification

File Processor - XLATE (INDX, IQUAN, CHR)

b. Functions

This subroutine translates the least significant digit of the equipment quantities from character to integer for each fiscal year. If no conversion is achieved, move a value of -1 to the quantity and print an appropriate error message.

c. Input

Common blocks XASTDTA, XCONTRL, XINPUT, XRQMDTA

d. Processing

The processing of XLATE is described as follows:

- For each fiscal year index of the quantity, search the table 'REF' for a match on the least significant digit and convert it to a number. If no match is found, move a -1 to the quantity and print an error message.
- If more than 100 translation errors are encountered, STOP PROCESSING.

e. Output

An error message for a negative LIN value will be printed if translation of the least significant digit is unsuccessful.

f. Interfaces

Called by: DECODE

Calls to: None

g. Arguments

- INDX - An index flag.
- IQUAN - The quantity to be translated.
- CHR - The least significant digit.

h. Tables and Items

Please refer to Table 2-4 for the Data Dictionary.

2.6 Program Description - Assessment Processor

Subsection 2.6 will contain a description of the main program for the Assessment Processor and the 38 associated subroutines. A complete listing of the programs to be discussed in subsection 2.6 is contained below.

<u>Paragraph Number</u>	<u>Program Name</u>
2.6.1	MAIN
2.6.2	BALBUF
2.6.3	BLDFIL
2.6.4	CLRBUF
2.6.5	DSYBUF
2.6.6	DSYCTL
2.6.7	DSYCT1
2.6.8	DSYCT2
2.6.9	DSYCT3
2.6.10	DSYINP
2.6.11	DSYSM1
2.6.12	DSYSM2
2.6.13	DSYSM3
2.6.14	DSYSM4
2.6.15	DSYWS
2.6.16	DSYXF1
2.6.17	DSYXF2
2.6.18	FILEBC
2.6.19	FILEWS
2.6.20	FRQCNT
2.6.21	GENBUF
2.6.22	IOCTL
2.6.23	LINTST
2.6.24	PAGADV
2.6.25	PIKUNT
2.6.26	RDRCD
2.6.27	RDWS
2.6.28	SAVID
2.6.29	SAVRTG
2.6.30	TBLQTY
2.6.31	TBLRTG
2.6.32	UICRTG
2.6.33	UICST
2.6.34	URATE
2.6.35	WRCLS
2.6.36	WRHDG
2.6.37	WRRCD
2.6.38	WRTTL
2.6.39	XFRDTA

A set of figures and tables is provided to assist the reader in understanding the internal logic of the model. The exhibits begin with a flow diagram of the Assessment Processor to provide a general understanding of the system. Other exhibits which follow are meant to provide a more detailed picture of the logic of the individual data elements and routines. A description of the purpose of each exhibit is presented below in the same sequence as the exhibit appears in this subsection.

Figure 2-18. Assessment Processor Flow Diagram

It is recommended that the flow diagram be used as the starting point for the first time reader in understanding the logic of this processor. An attempt has been made to highlight the major functions performed and explain them in a manner that a reader totally unfamiliar with the system could understand. The subsections of 2.1, System Description, and 2.3, General Description, should be read first to obtain an introduction to the purpose of the Assessment Processor. The flow diagram is annotated with subroutine names wherever possible to link the overall logic of the processor with the individual functions of each routine.

Figure 2-19. Common Block Cross-Reference (Assessment Processor)

The majority of information is passed between routines via common blocks. This figure should assist the reader in understanding which data elements, or blocks of elements, are used in which routines. This should be especially useful when trying to trace an individual element throughout the entire processor, or in cases where a new common block variable is added. If a new variable is added to a common block, this table will show immediately which routines will have access to the new variable.

Table 2-5. Common Block Dictionary (Assessment Processor)

The Common Block Dictionary identifies the individual arrays or variables defined within each common block. This table will serve as a useful tool in tracing a specific data element throughout the processor. The Data Dictionary, described on the following page, is also useful in describing the function and usage of each common block element.

Figure 2-20. Program Unit Hierarchy (Assessment Processor)

This figure shows the structure of all the routines within the Assessment Processor. The processor is comprised of one main program and a series of subroutines, all of which are controlled, directly or indirectly, by the main program. This chart shows how the processor flows from the main program through each of the subroutines.

Figure 2-20, along with Figure 2-21, allows the reader to see which routines are called by other routines, rather than by the main program.

Figure 2-21. Subroutine Cross-Reference (Assessment Processor)

The subroutine cross-reference provides an explanation of which routines control the processing of other routines. On the vertical axis (side of page), the calling (controlling) routines are shown. The routines called are shown on the horizontal axis (top of page). A dot in the appropriate column links the called routine with the controlling routine.

Table 2-6. Data Dictionary (Assessment Processor)

This table provides a description of every common block element in the Assessment Processor. This listing includes both variables and arrays and describes the size, format, uses and purpose of each data element. This table should be used as the main reference for information on the purpose, or other characteristics, of a data element.

Figures 2-22 through 2-33, Report Layouts (Assessment Processor)

These figures provide a layout of the reports produced by the Assessment processor. These figures will be referenced within individual program descriptions wherever applicable and provide further information on the format and content of each report.

All of the above figures and tables are referenced throughout this subsection. They have all been placed at the front of the section for ease of reference.

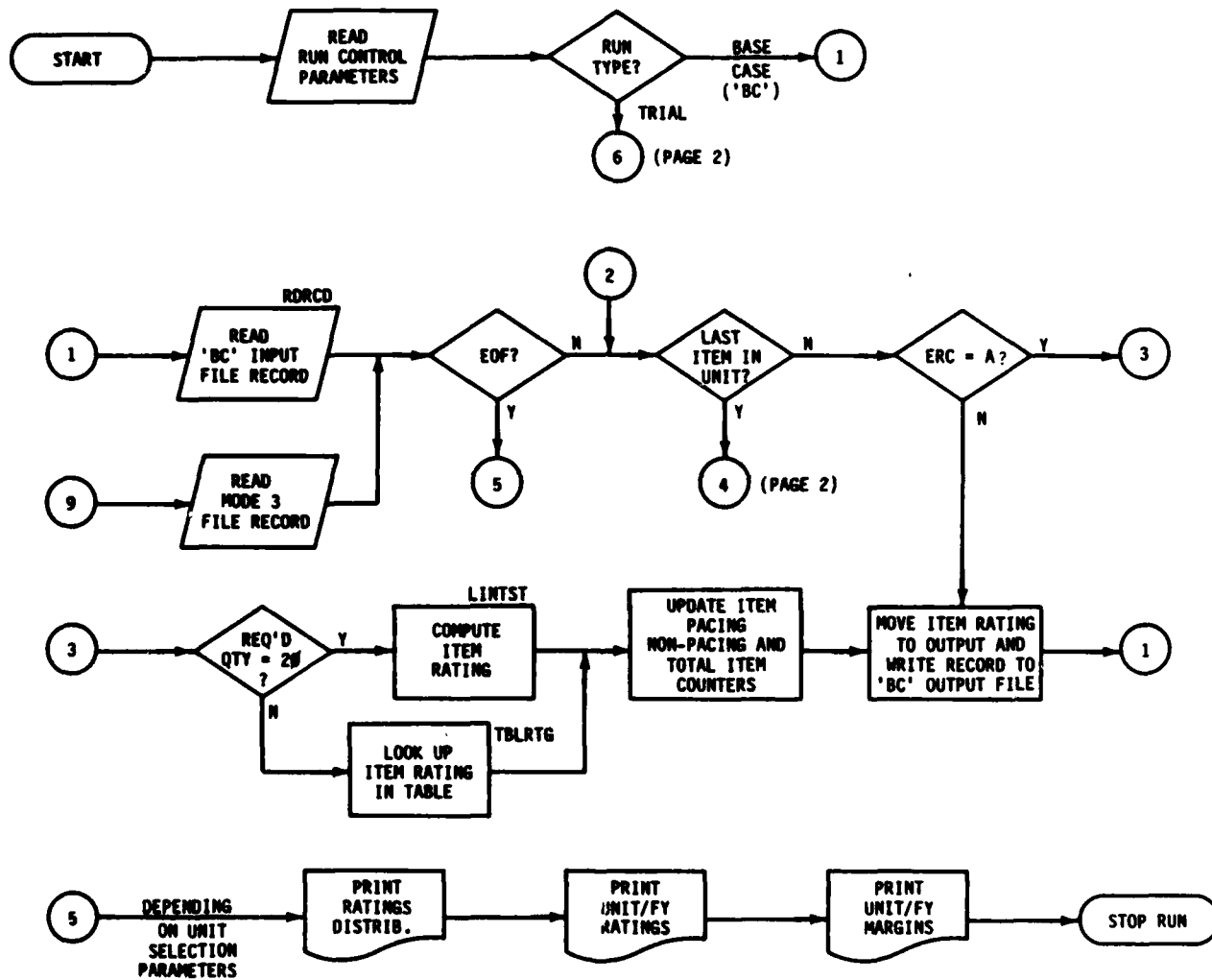


Figure 2-18. Assessment Processor Flow Diagram
(page 1 of 3 pages)

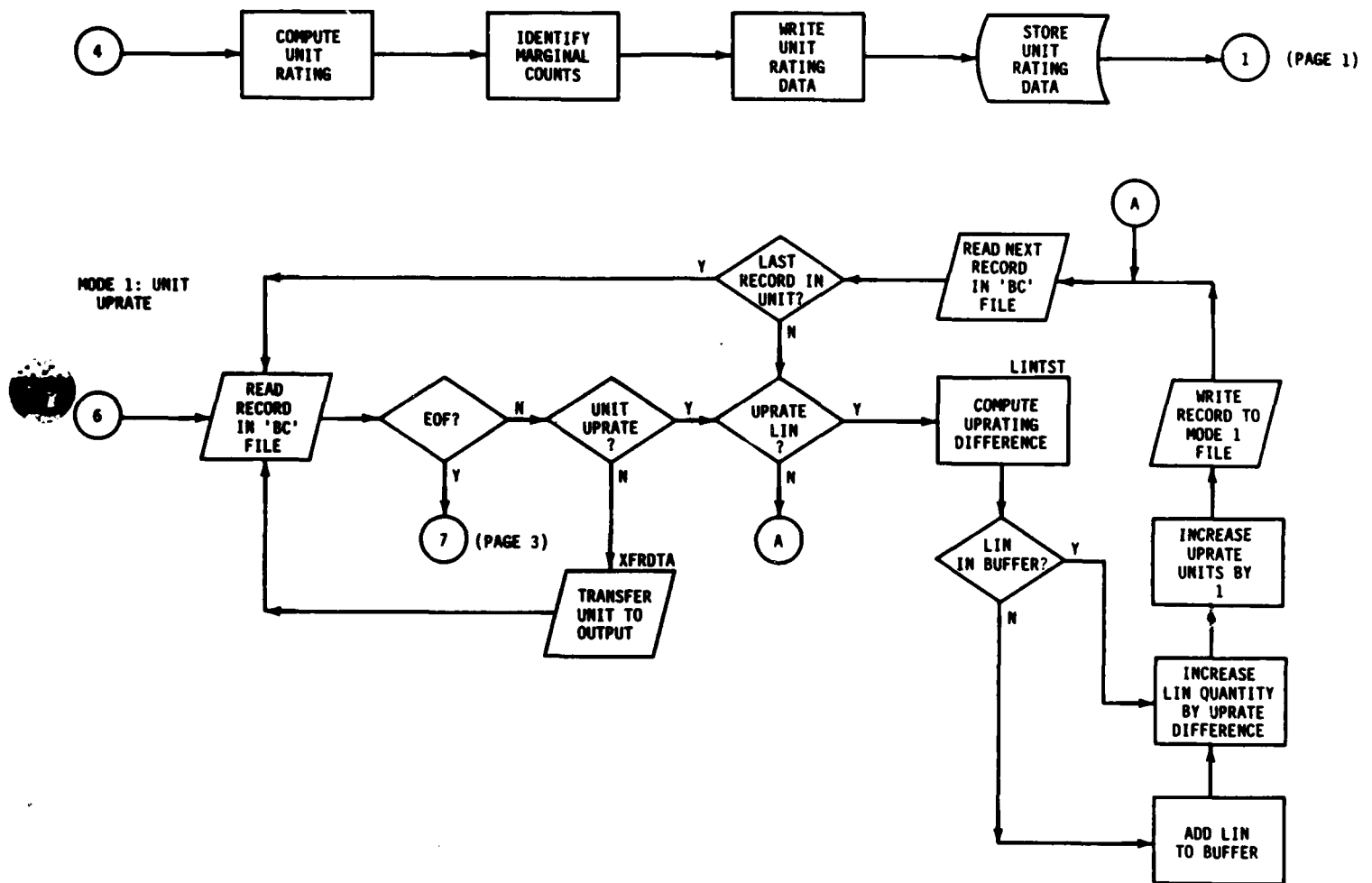


Figure 2-18. Assessment Processor Flow Diagram
(page 2 of 3 pages)

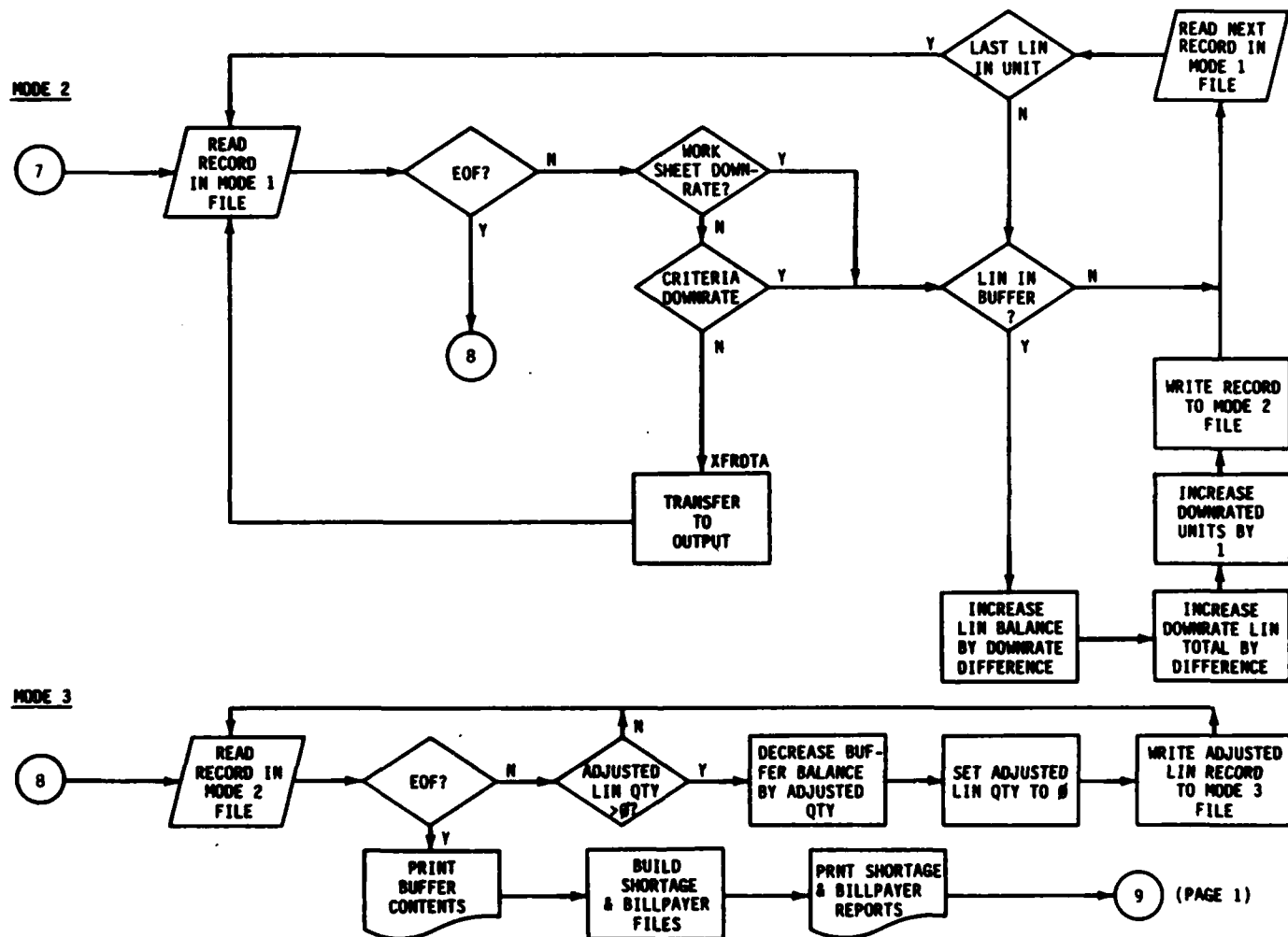


Figure 2-18. Assessment Processor Flow Diagram
(page 3 of 3 pages)

ROUTINE	BALBUF	●					●				●
	BLDFIL		●								
	CLRBUF	●					●				
	DSYBUF	●	●								
	DSYCTL										
	DSYCT1		●					●			
	DSYCT2		●					●			
	DSYCT3							●			
	DSYINP									●	
	DSYSM1			●							
	DSYSM2			●							
	DSYSM3		●					●			
	DSYSM4		●					●			
	DSYSM5		●					●			
	DSYXF1	●					●				●
	DSYXF2	●					●				●
	FILEBC		●					●			
	FILEMS		●					●			
	FRQCNT			●				●			
	GENBUF	●					●				
	IOCTL		●			●			●		
	LINTST						●		●		
	MAIN		●			●			●	●	
	PAGADV										
	PIKUNT									●	●
	RDRCD		●			●	●				●
	RDMS										●
	SAVID		●					●			●
	SAVRTG		●					●	●		●
	TBLQTY										
	TBLRTS										
	UICRTG		●				●		●		
	UICST		●			●	●	●	●	●	●
	URATE								●		
	WRCLS		●		●						
	WRHOG	●	●					●			
	WRRCD		●			●	●		●		●
	WRTTL		●		●						
	XFRDTA								●		

XBUF
XCONTRL
XCOUNT
XDSYNTH
XIOFILE
XITMDTA
XRESULTS
XRTCTL
XSELECT
XUNITDA

COMMON BLOCK

Figure 2-19. Common Block Cross-Reference (Assessment Processor)

Table 2-5. Common Block Dictionary (Assessment Processor)

<u>COMMON BLOCK VARIABLE</u>	<u>VARIABLE</u>
XBUFR	BUFCOD, BUFNAM, IBUF1, IBUF2, IBUF3, IBUFEN, BUFUIC, IFYDSY
XCONTRL	FRSTFY, RUNCLS, NFYSET, ASOF, EDATE, DTASET, CMDSET, CMDPIK, CCTID, RUNTYP, DTADTE
XCOUNT	ICNT, FRQ
XDSYWTH	WIDTH
XIOFILE	RDFILE, WRFILE, RTGSYM
XITMDTA	LIN, LINNM, ERC, PACR, ACFT, IREQD, IAUTH, ICHG, IPROG, LINRTG, FIXSYM, QTYSGN, ADJQTY, RTGSGN, ADJRTG
XRESULTS	NUIC, CODE, TEXT, QUAL, ALOFY, IRATGB, POOLID
XRTGCTL	NP, NT, RTGPAS, PSMAX, ICRATG, SYMBOL
XSELECT	BR, DAMPL, MACOM, ALO, SRC, PIKLVL, TGT LVL
XUNTDTA	POOLNR, NFY, UIC, UBR, UICNM, DTADTE, UDAMPL, UMACOM, USRC, UALO, UEDATE, INDXFY

NOTE: Refer to Table 2-6, Data Dictionary for additional information on Assessment Processor variables.

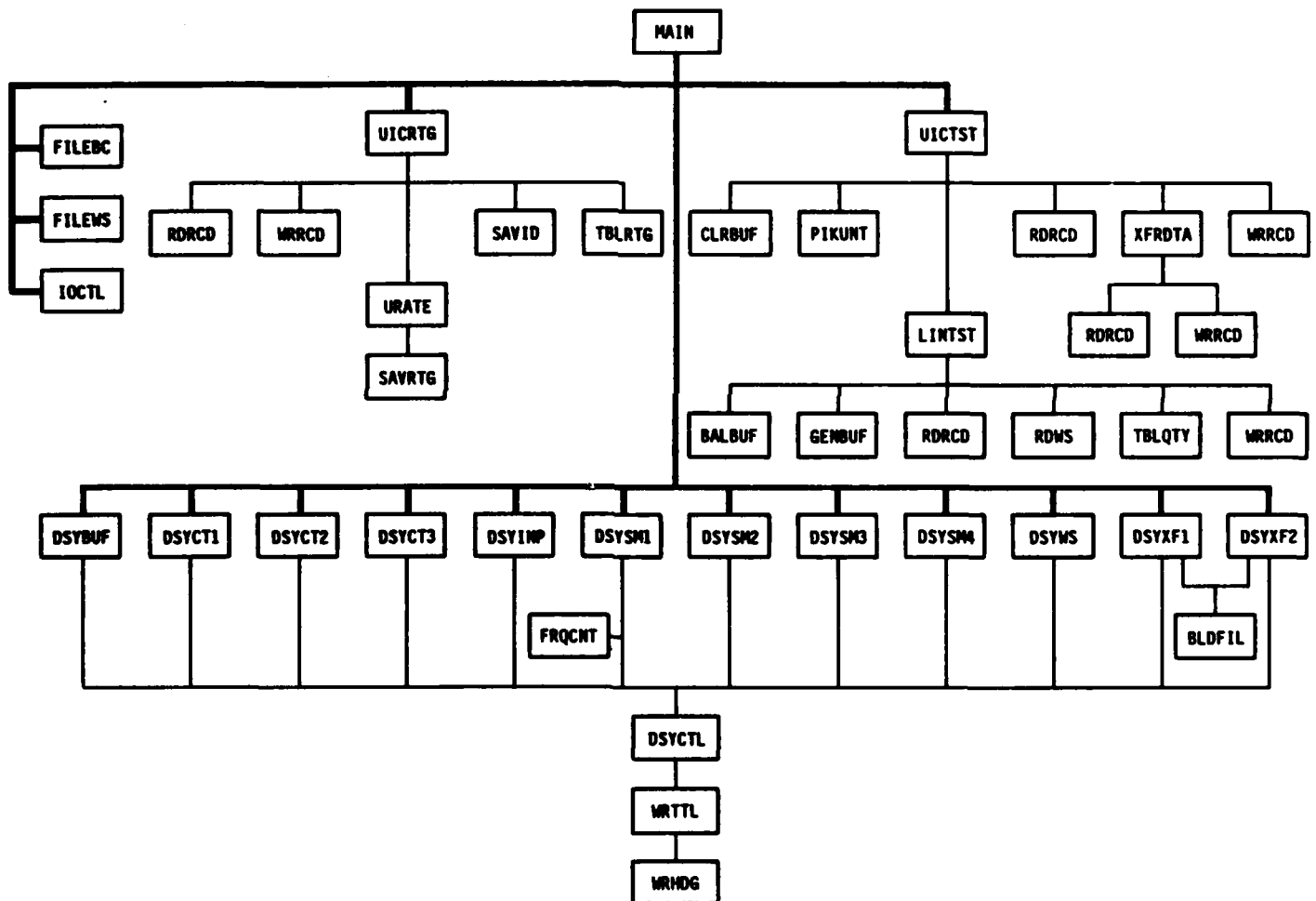


Figure 2-20. Program Unit Hierarchy (Assessment Processor)

Table 2-6. Data Dictionary - Assessment Processor
(page 1 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
ACFT	LINTST(P) RDRCD(I)* TBLQTY(P) TBLRTG(P) UICRTG(P) WRRCD(O)	N/A	A1	Indicates whether an item is Aircraft.
ADJQTY	BALBUF(P)* CLRBUF(P) DSYXF1(I,P) DSYXF2(I,P) GENBUF(P)* RDRCD(I) UICRTG(P)* WRRCD(O)	N/A	I3	The hold area for the equipment amount to be up-rated or down-rated
ADJRTG	LINTST(P)* RDRCD(I)* UICRTG(P)* WRRCD(O)	N/A	I1	The hold area for the rating of the item.
ALO	DSYINP(O)* MAIN(I) PIKUNT(P) WRHDG(O)	2	A	The unit selection parameters for ALO; one for uprate selection, one for downrate selection.
ALOFY	DSYCT2(O) DSYSM4(O) SAVID(P)*	(400x7)	I	ALO for each year for unit to be printed on report.
ASOF	WRTTL(O)*	N/A	A6	Date of TAEDP data stored in code.
BR	DSYINP(O,P) MAIN(I)* PIKUNT(P) WRHDG(O)	2	A2	The unit selection parameter for Branch; one for uprate selection, one for downrate selection.

Table 2-6. Data Dictionary - Assessment Processor
(page 2 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
BUFCOD	BALBUF(P) CLRBUF(P) DSYBUF(O)* GENBUF(P)	(400x7)	A6	The unit ID of each equipment item placed in the buffer.
BUFNAM	DSYBUF(O) GENBUF(P)*	(400x7)	A24	The unit name of each equipment item placed in the buffer.
BUFUIC	BALBUF(P)* CLRBUF(P)	(400x7)	A6	The last unit ID that satisfies the equipment shortage held in the buffer.
CCTID	MAIN(I)* WRHDG(O)	N/A	A6	The CCT identifier for display.
CMDPIK	MAIN(I)* WRHDG(O)	13	A3	The 'YES' or 'NO' parameters used to select units for each of 13 MACOM's.
CMDSET	WRHDG(O)*	13	A3	The MACOM abbreviations in processing order.
CODE	DSYCT1(O) DSYCT2(O) DSYSM3(O) DSYSM4(O) DSYWS(O) FILEBC(O) FILEWS(O) SAVID(P)*	400	A6	The unit ID of each reported unit in TAEDP sequence.
DAMPL	DSYINP(O) MAIN(I)* PIKUNT(P)	(2x2)	I	The DAMPL priority range selection parameter; one pair (high and low values) for uprate, one pair (high and low values) for downrate.
DTADTE	MAIN(I)* WRTTL(O)	N/A	A6	The TAEDP run date.

Table 2-6. Data Dictionary - Assessment Processor
(page 3 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
DTASET	MAIN(I,P)* WRTTL(P)	N/A	A8	The TAEDP run date.
EDATE	MAIN(I)* WRHDG(O)	N/A	I2	Year of unit activation.
ERC	RDRCD(I)* UICRTG(P) WRRCD(O)	N/A	A1	Item equipment readiness code.
FRQ	DSYSM2(O) FRQCNT(P)*	(6x7)	A	The percentage frequency distribution of unit ratings for each Fiscal Year (six possible values).
FRSTFY	BLDFIL(P) MAIN(I,P)* UICST(P)	N/A	I2	First year in planning period.
IAUTH	RDRCD(I)* WRRCD(O)	N/A	I4	Item authorized quantity.
IBUF 1	DSYBUF(O) GENBUF(P)*	(400x2x7)	I	Item quantities required and number of units involved (max 400) for each Fiscal Year.
IBUF 2	BALBUF(P)* DSYBUF(O)	(400x2x7)	I	Item quantities available and number of units involved (max 400) for each Fiscal Year.
IBUF 3	BALBUF(P) CLRBUF(P) GENBUF(P)*	(400x7)	I	Difference (buffer balance) between IBUF1 and IBUF2 for each unit and FY.
IBUFEN	BALBUF(P) CLRBUF(P) DSYBUF(P) GENBUF(P)*	7	I	The length of the buffer for each FY.

Table 2-6. Data Dictionary - Assessment Processor
(page 4 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
ICHG	RDRCD(I)* UICRTG(P) WRRCD(O)	N/A	I4	Item change quantity.
ICNT	DSYSM1(O) FRQCNT(P)*	(6x7)	I	Count of number of unit ratings for each year (six possible types).
ICRATG	SAVRTG(P) TBLRTG(P) URATE(P)*	N/A	I1	Unit C-rating.
IFYDSY	DSYBUF(P)* DSYXF1(P)* DSYXF2(P)* WRHDG(P)	N/A	I2	Fiscal year index for display.
INDXFY	SAVID(P)* SAVRTG(P)	N/A	I2	Fiscal year index.
IPROJ	LINTST(P)* RDRCD(I) UICRTG(P) UICTST(P)* WRRCD(O)	N/A	I4	Item projected on-hand quantity.
IRATGB	DSYCT1(O) DSYCT2(P,O) DSYCT3(P) DSYSM3(O) DSYSM4(P,O) DSYWS(O) FILEBC(P,O) FILEWS(O) FRQCNT(P) SAVRTG(P)* UICTST(P)*	(400x12x7) I		Holds the ratings and marginal counts in TAEDP sequence for all units, to facilitate display on reports.

Table 2-6. Data Dictionary - Assessment Processor
(page 5 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
IREQD	LINTST(P) RDRCD(I)* TBLQTY(P) TBLRTG(P) UICRTG(P) WRRCD(O)	N/A	I4	Item required quantity.
LIN	BALBUF(P) CLRBUF(P) DSYXF1(I,P,O) DSYXF2(I,P,O) GENBUF(P) RDRCD(I)* WRRCD(O)	N/A	A6	Item identification code.
LINNM	DSYXF1(I,O) DSYXF2(I,O) GENBUF(P) RDRCD(I)* WRRCD(O)	N/A	A22	Item name on B-record.
LINRTG	LINTST(P)* RDRCD(I) UICRTG(P)* UICRTST(P)* WRRCD(O)	2	I	Holds ratings of individual equipment items within a unit. For CCT units, two ratings are held.
MACOM	DSYINP(P,O) MAIN(I)* PIKUNT(P)	2	A3	The unit selection parameters for MACOM; one for unit uprate selection, one for unit downrate selection.
NFY	BLDFIL(I,P) DSYXF1(I,P) DSYXF2(I,P) RDRCD(I)* SAVID(P) UICRTST(P) WRRCD(O)	N/A	I2	Fiscal year on current A-record.

Table 2-6. Data Dictionary - Assessment Processor
(page 6 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
NFYSET	DSYCT2(O) DSYSM4(O) MAIN(P)* SAVID(O) WRHDG(P)	7	I	The set of seven fiscal years of the planning period, expressed as the last two digits of the year.
NP	DSYCT2(P,O)* DSYSM4(P,O)* FILEBC(P,O)* SAVRTG(P) UICRTG(P)* URATE(P)	(5x2)	I	The counts at each rating level (0, 1, 2, 3, 4) for pacing items. For CCT units, two counts are held.
NT	DSYCT2(P,O)* DSYSM4(P,O)* SAVRTG(P) UICRTG(P)* URATE(P)	(5x2)	I	The counts at each rating level (0, 1, 2, 3, 4) for all items. For CCT units, two counts are held.
NUIC	DSYCT1(P) DSYCT2(P) DSYCT3(P) DSYSM3(P) DSYSM4(P) DSYSM5(P) FILEBC(P) FILEWS(P) FRQNT(P) SAVID(P)* WRHDG(O)	N/A	I4	Count of rated units.
PACR	RDRCD(I)* UICRTG(P) WRRCD(O)	N/A	A1	Pacing item indicator.
PASMAX	MAIN(P)* SAVRTG(P) UICRTG(P) URATE(P) WRRCD(P)	N/A	I1	Number of passes to be performed (1 or 2).

Table 2-6. Data Dictionary - Assessment Processor
(page 7 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
PIKLVL	DSYINP(O) MAIN(I)* PIKUNT(P)	2	I	The unit selection parameter for rating level; one for unit uprate selection, one for unit downrate selection.
POOLID	SAVID(P)* SAVRTG(P)	N/A	I3	Sequence number of unit in input.
POOLNR	RDRCD(I)* RDWS(P) SAVID(P) UICST(P) WRRCD(O)	N/A	I3	Sequence number of unit in input.
QTYSGN	BALBUF(P)* GENBUF(P)* RDRCD(I) WRRCD(O)	N/A	A1	A '+' for up-rating and a '-' for down-rating.
QUAL	DSYCT1(O) DSYCT2(O) DSYSM4(O) DSYWS(O) FILEBC(O) SAVID(P)*	400	A2	The branch of each unit reported in TAEDP sequence.
RDFILE	IOCTL(P)* RDRCD(I) UICST(P)	N/A	I2	The device number of the input file.
RTGFAS	SAVRTG(P) UICRTG(P)* URATE(P)*	N/A	I1	The current rating pass being executed.
RTGSGN	LINTST(P)* RDRCD(I)* WRRCD(O)	N/A	A1	A '+' for up-rating and a '-' for down-rating.

Table 2-6. Data Dictionary - Assessment Processor
(page 8 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
RTGSYM	IOCTL(P)* WRRCD(O)	N/A	A1	Letter identifying rating value.
RUNCLS	MAIN(I)* WRCLS(O) WRTTL(O)	N/A	A12	Classification of run.
RUNTPP	DSYWS(P) FILEWS(P) IOCTL(P) MAIN(I,P)* WRTTL(P)	N/A	A5	'BASE' OR 'TRIAL'
SRC	DSYINP(P,O) MAIN(I)* PIKUNT(P)	2	A9	The unit selection parameter for SRC; one for unit uprate selection, one for unit downrate selection.
SYMBOL	IOCTL(P) LINTST(P)* RDRCD(I)* UICRTG(P) UICST(P)* WRRCD(O) XFRDTA(P)*	N/A	I1	A flag used in item processing.
TEXT	DSYCT1(O) DSYCT2(O) DSYSM3(O) DSYSM4(O) DSYWS(O) FILEBC(O) SAVID(P)*	400	A21	The name of each reported unit in TAEDP sequence.
TGTLVL	DSYINP(O) MAIN(I)* UICST(P)	2	I	The desired rating level of each unit selected; one for unit uprate selection, one for unit downrate selection.

Table 2-6. Data Dictionary - Assessment Processor
(page 9 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
UALO	PIKUNT(P) RDRCD(I)* SAVID(P) WRRCD(O)	N/A	I1	Unit ALO.
UBR	PIKUNT(P) RDRCD(I)* SAVID(P) WRRCD(O)	N/A	A2	Unit Branch.
UDAMPL	PIKUNT(P) RDRCD(I)* WRRCD(O)	N/A	I5	Unit Priority.
UDATE	RDRCD(I)* WRRCD(O)	N/A	I2	Effective date of unit.
UIC	BALBUF(P) DSYXF1(I,O) DSYXF2(I,O) RDRCD(I,P)* SAVID(P) WRRCD(O)	N/A	A6	Unit Identifier.
UICNM	DSYXF1(I,O) DSYXF2(I,O) RDRCD(I)* SAVID(P) WRRCD(O)	N/A	A22	Unit Name.
UMACOM	PIKUNT(P) RDRCD(I)* WRRCD(O)	N/A	A6	Unit MACOM.
USRC	PIKUNT(P) RDRCD(I)* WRRCD(O)	N/A	A9	Unit SRC

Table 2-6. Data Dictionary - Assessment Processor
(page 10 of 10 pages)

<u>NAME</u>	<u>SUBROUTINE</u>	<u>SIZE</u>	<u>FMT</u>	<u>DESCRIPTION</u>
WIDTH	WRCLS(P) WRTTL(P).*	12	A3	Controls the centering of display lines for all of the 12 reports.
WRFILE	IOCTL(P)* WRRCD(O)	N/A	I2	The device number for the output file.

Note: The letter (P, I, O) next to the subroutine names denotes the usage of the table as follows:

- (P) - processing
- (I) - input
- (O) - output

* An asterisk shown to the right of the routine name indicates that the table is originated by that routine.

Note: The letter (A, I) in the format column of the table denotes the array characteristics as follows:

- (A) - alphanumeric
- (I) - integer

74/UNCLASSIFIED/ 25 JUL 83 /PG 110

EDATE MODEL UNIT EQUIPMENT READINESS DATA DATE: PAGE 1
DISPLAY AP / 1/ RATING COUNT WITHIN FY REPT DATE: 07/25/83

DATA SET: ACTIVATED UNITS
RUN TYPE: TRIAL CASE

***** UNCLASSIFIED *****

(NUMBER OF UNITS = 3)

RATING LEVEL	COUNT OF UNITS AT EACH RATING WITHIN EACH FY						
	FY82	FY83	FY84	FY85	FY86	FY87	FY88
C-0	0	0	0	0	0	0	0
C-1	0	0	0	0	0	1	2
C-2	0	0	0	0	0	0	0
C-3	0	0	0	0	0	0	0
C-4	3	3	3	3	3	2	1
TOTAL	3	3	3	3	3	3	3

***** UNCLASSIFIED *****

Figure 2-22. Report #1, Rating Count Within FY

74/UNCLASSIFIED/ 25 JUL 83 /PG 111

EDATE MODEL UNIT EQUIPMENT READINESS DATA DATE: PAGE 1
 DISPLAY AP / 2/ RATING PERCENT WITHIN FY REPT DATE: 07/25/83

DATA SET: ACTIVATED UNITS
 RUN TYPE: TRIAL CASE

***** UNCLASSIFIED *****

(NUMBER OF UNITS = 3)

RATING LEVEL	PERCENT OF UNITS AT EACH RATING WITHIN EACH FY							
	FY82	FY83	FY84	FY85	FY86	FY87	FY88	
C-0	.0	.0	.0	.0	.0	.0	.0	.0
C-1	.0	.0	.0	.0	.0	33.3	66.7	
C-2	.0	.0	.0	.0	.0	.0	.0	
C-3	.0	.0	.0	.0	.0	.0	.0	
C-4	100.0	100.0	100.0	100.0	100.0	66.7	33.3	
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

***** UNCLASSIFIED *****

Figure 2-23. Report #2, Rating Percent Within FY

EDATE MODEL DISPLAY AP / 3/		UNIT EQUIPMENT READINESS 7-YEAR SUMMARY I		DATA DATE: 07/25/83 REPT DATE:	
		DATA SET: ACTIVATED UNITS RUN TYPE: TRIAL CASE			
		***** UNCLASSIFIED *****			
FY82 ACTIVATIONS					
NR	UIC	BR	UNIT NAME	FY82	FY83
1	UNT001	QM	CO PETROLEUM SUPP	C-4	C-4
2	UNT004	MD	HHO BN MEDICAL	C-4	C-4
3	UNT005	OD	DET TECHNICAL SUPPLY	C-4	C-4
				FY84	FY85
				C-4	C-4
				C-4	C-4
				C-4	C-4
				FY86	FY87
				C-4	C-4
				C-4	C-4
				C-4	C-4
				FY88	
				C-4	C-4
				C-4	C-4
				C-4	C-4
				***** UNCLASSIFIED *****	

Figure 2-24. Report #3, 7-Year Summary I Report,
New Units

EDATE MODEL
DISPLAY AP / 5/

UNIT EQUIPMENT READINESS
7-YEAR SUMMARY I

DATA SET: CCT UNITS
RUN TYPE: BASE CASE

***** UNCLASSIFIED *****

DATA DATE: 07/25/83
PAGE 1

UNITS IMPACTED BY CCT 300-73
IN MACOM

UNIT	UIC	BR	STE-NO FC-NO	EUR-NO TC-NO	KOR-NO OTH-NO	PAC-NO NG-YES	ALA-NO AR-YES	HAW-NO DAR-NO	PAN-NO	FY82	FY83	FY84	FY85	FY86	FY87	FY88
1	UNIT001	QM														
2	UNIT002	QM	CO PETROLEUM SUPP													
3	UNIT003	AV	CO PETROLEUM SUPP													
4	UNIT004	MD	HHD ATC BN													
5	UNIT008	EN	HHD BN MEDICAL													
6	UNIT010	EN	CO CONSTRUCTION SPT													
7	UNIT012	EN	CO BRG EN BN RIBBON													
8	UNIT013	FA	BTRY TGT ACQ AIM DIV													
9	UNIT014	IN	BTRY 8IN SP INF DIV													
10	UNIT015	MD	HHC INF DIV													
			BN AIM DIV													

***** UNCLASSIFIED *****

Figure 2-26. Report #5, 7-Year Summary I Report
CCT Units

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EDATE MODEL
DISPLAY AP / 7/

UNIT EQUIPMENT READINESS

PAGE 1

7-YEAR SUMMARY III

DATA DATE:

REPT DATE: 07/25/83

DATA SET: CCT UNITS

RUN TYPE: BASE CASE

***** UNCLASSIFIED *****

UNITS IMPACTED BY CCT 300-73
IN MACOM

	STE=NO FC=NO	EUR=NO TC=NO	KOR=NO OTH=NO	PAC=NO NG=YES	ALA=NO AR=YES	HAW=NO DAR=NO	PAN=NO
RATING CHANGE	FY82	FY83	FY84	FY85	FY86	FY87	FY88
-3	0	0	0	0	0	0	0
-2	0	0	0	0	0	0	0
-1	0	0	0	0	0	0	0
0	10	10	10	10	10	10	10
+1	0	0	0	0	0	0	0
+2	0	0	0	0	0	0	0
+3	0	0	0	0	0	0	0
TOTAL UNITS	10	10	10	10	10	10	10

***** UNCLASSIFIED *****

Figure 2-28. Report #7, 7-Year Summary III Report
CCT Units

74/UNCLASSIFIED/ 25 JUL 83 /PG 12

EDATE MODEL
DISPLAY AP / 8

UNIT EQUIPMENT READINESS

PAGE 1

ITEM TRANSFER SUMMARY

DATA DATE:

REPT DATE: 07/25/83

DATA SET: ACTIVATED UNITS

RUN TYPE: TRIAL CASE

***** UNCLASSIFIED *****

FY88

LIN	NOMENCLATURE	SHORTAGE		BILLPAYERS		STILL SHORT
		QTY	UNITS	QTY	UNITS	
F39378	CRANE WHL MTD 20 TON	1	1	0	0	1
H52087	FILTER SEP LIQ 350 GPM	14	1	0	0	14
J04717	FUEL SYS SUP PT LESS C	1	1	0	0	1
K54707	HOSELINE FUEL 4 IN	2	1	0	0	2
P97051	PUMP ASSY FLAM LIQUID	26	1	0	0	26
S70027	STLR LB 22 1/2T M871	2	1	0	0	2
S73372	STLR TNK 5000G M969	5	1	0	0	5
W91074	TRACTOR WHL IND %CCE<	1	1	0	0	1
X49051	TRK LF DED 1000 LB	2	1	0	0	2

***** UNCLASSIFIED *****

Figure 2-29. Report #8, Item Transfer

EDATE MODEL DISPLAY AP / 9/		UNIT EQUIPMENT READINESS WORK SHEET		DATA DATE: REPT DATE: 07/25/83		PAGE 1					
		DATA SET: ACTIVATED UNITS									
		RUN TYPE: BASE CASE									
		***** UNCLASSIFIED *****									
NR	UIC	BR	UNIT NAME	FY82	FY83	FY84	FY85	FY86	FY87	FY88	
1	UNT001	QM	CO PETROLEUM SUPP	BASE: C-4 TRIAL: C-4 ACHVD: C-4 NEXT: C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	
2	UNT004	MD	HHD BN MEDICAL	BASE: C-4 TRIAL: C-4 ACHVD: C-4 NEXT: C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	
3	UNT005	OD	DET TECHNICAL SUPPLY	BASE: C-4 TRIAL: C-4 ACHVD: C-4 NEXT: C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	C-4 C-4 C-4 C-	
		***** UNCLASSIFIED *****									

Figure 2-30. Report #9, Work Sheet Report

74/UNCLASSIFIED/ 25 JUL 83 /PG 109

EDATE MODEL
DISPLAY AP /10/

UNIT EQUIPMENT READINESS

PAGE 1

USER INPUT

DATA DATE:

REPT DATE: 07/25/83

DATA SET: ACTIVATED UNITS

RUN TYPE: TRIAL CASE

***** UNCLASSIFIED *****

UNIT SELECTION PARAMETERS

PARAMETER	UPRATE VALUE	DOWNRATE VALUE
SELECT-LEVEL	4	1
MACOM	0	0
SRC	0	0
ALO	0	0
BRANCH	0	0
DAMPL-HI	0	0
DAMPL-LO	0	0
TARGET-LEVEL	3	3

***** UNCLASSIFIED *****

Figure 2-31. Report #10, User Input

74/UNCLASSIFIED/ 25 JUL 83 /PG 101

EDATE MODEL
DISPLAY AP /11/

UNIT EQUIPMENT READINESS

PAGE 1

SHORTAGE DETAIL

DATA DATE:

REPT DATE: 07/25/83

DATA SET: ACTIVATED UNITS
RUN TYPE: TRIAL CASE

***** UNCLASSIFIED *****

FY88

LIN	LIN NAME	UIC	UIC NAME	QTY
X49051	TRK LF DED 1000 LB	UNT001	CO PETROLEUM SUPP	2
TOTALS		UNITS: 1	ITEMS:	2

***** UNCLASSIFIED *****

Figure 2-32. Report #11, Shortage Detail Report

74/UNCLASSIFIED/ 25 JUL 83 /PG 102

EDATE MODEL
DISPLAY AP /12/

UNIT EQUIPMENT READINESS

PAGE 1

BILLPAYER DETAIL

DATA DATE:

REPT DATE: 07/25/83

DATA SET: ACTIVATED UNITS
RUN TYPE: TRIAL CASE

***** UNCLASSIFIED *****

FY82

LIN	LIN NAME	UIC	UIC NAME	QTY
-----	----------	-----	----------	-----

***** NO BILLPAYERS PRESENT THIS FISCAL YEAR *****

***** UNCLASSIFIED *****

Figure 2-33. Report #12, Billpayer Detail Report

2.6.1 Program Description

a. Identification

Assessment Processor - MAIN

b. Functions

This processor rates each unit present in the input file by rating each item of equipment separately and then aggregating all of the ratings into an overall rating for the unit. Summaries are generated for all of the rating information. An output file of the ratings is also generated.

This procedure utilizes two methods of execution. One method is the 'BASE' case, which will simply rate all of the units requested. The other method is the 'TRIAL' case, which will attempt to redistribute the units based on the ratings generated in the 'BASE' case or on the worksheet prepared by the user.

c. Input

This process requires the following files as input:

- Run Control Parameter File (MTOE*AP1CTL03); Unit #2.
- Selected Units File; Unit #7.
 - CCT File (MTOE*FP1PIK40)
 - NEW ACTIVATION (MTOE*FP1PIK41)
- Worksheet File of Ratings (MTOE*AP1WIN21); Unit #9.
- Base Case File (MTOE*AP1BAS21)
- Common blocks XCONTRL, XIOFILE, XRTGCTL, XSELECT.

d. Processing

The processing of MAIN is described as follows:

- Begin Assessment Processor.
- Read user-input Run Control Parameters for:
 - Dataset (either 'NEWUNT' or 'CCTUNT').
 - Fiscal year.
 - TAEDP run date (DTADTE).
 - Run class (either 'UNCLASSIFIED,' 'CONFIDENTIAL,' or 'SECRET').
 - Run type (either 'BASE' or 'TRIAL').
- If the Dataset is 'NEWUNT,' read the EDATE.
- If the Dataset is 'CCTUNT,' read the CCT identifier and the 'YES' or 'NO' values on each of the 13 MACOM parameters. A 'YES' value for a MACOM will utilize that MACOM as a part of the selection criteria.

- Establish whether a single rating pass (PASMAX = 1) or a dual rating pass (PASMAX = 2) is to be used.
- If the run type is 'TRIAL,' read in the parameters for selecting the units to be down-rated and up-rated.

The parameters utilized are as follows:

- PIKLV (the unit rating level for selection).
- MACOM (the command to which the unit belongs).
- SRC (the Standard Requirements Code of the unit).
- ALO (the Authorized Level of Organization).
- BR (the Army Branch).
- DAMPL (the priority); a range of DAMPL values is utilized.
- Target level (the unit rating level for up-rate or down-rate).
- If the run type is 'TRIAL'
 - Set the mode = 1.
 - Call IOCTL(1) to select the input and output file device numbers to be used.
 - Call UICST(1) to perform unit up-rate.
 - Call IOCTL(2) and UICST(2) to perform unit down-rate.
 - Call IOCTL(3) and UICST(3) to perform unit rerate.
 - Display contents of unit buffer.
- If the run type is 'BASE,' start here; for 'TRIAL,' continue:
 - Call IOCTL(0).
 - Call UICRTG to compute the ratings of the units.
 - If run type is 'TRIAL,' call DSYINP to display the unit selection parameters.
 - Generate summaries of unit ratings.
- If Dataset = 'NEWUNT' generate the worksheet (DSYWS) and save it in file 8 (FILEWS).
- If Dataset = 'NEWUNT' and run type = 'BASE,' call FILEBC to hold the base case rating data in file 16.
- Terminate Assessment Processor.

e. Output

The following outputs are produced by the Assessment Processor:

- Rating Count Within FY Report (Report #1, Figure 7I).
- Rating Percent Within FY Report (Report #2, Figure 7J).
- 7-Year Summary I Report, New Activations (Report #3, Figure 7K).
- 7-Year Summary II Report, New Activations (Report #4, Figure 7L).
- 7-Year Summary I Report, CCT Units (Report #5, Figure 7M).
- 7-Year Summary II Report, CCT Units (Report #6, Figure 7N).

- 7-Year Summary III Report, CCT Units, (Report #7, Figure 7O).
- Item Transfer Summary, (Report #8, Figure 7P).
- Work Sheet Report, (Report #9, Figure 7Q).
- User Input, (Report #10, Figure 7R).
- Shortage Detail Report, (Report #11, Figure 7S).
- Billpayer Detail Report, (Report #12, Figure 7T).

f. Interfaces

Called by: None

Calls to: DSYBUF
DSYCT1
DSYCT2
DSYCT3
DSYINP
DSYSM1
DSYSM2
DSYSM3
DSYSM4
DSYWS
DSYXF1
DSYXF2
FILEBC
FILEWS
IOCTL (Ø) (1) (2) (3)
PAGADV
UICRTG
UICRTST (1) (2) (3)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.2 Program Description

a. Identification

Assessment Processor - BALBUF (IDIFF, IFY, *)

b. Functions

This subroutine controls the processing of unit down-rating. Specifically, it maintains the count of the balance of each piece of equipment available for the unit versus the equipment required. A separate count is kept for each fiscal year. A balance is maintained for every piece of equipment.

c. Input

Common blocks XBUFR, XITMDTA, XUNTDTA

d. Processing

The processing of BALBUF is described as follows:

- For the applicable fiscal year, search the BUFCOD table for the existence of the unit ID. Once found, the proper index values will be set to reference other tables. If the unit ID is not found in the table (and not blank), return 1.
- Utilizing IDIFF (the amount of equipment found from some other unit) passed for LINTST, adjust the balance for that piece of equipment in the table BALBUF3.
- If the equipment requirement is satisfied, store the unit ID that balanced the buffer.
- Update IBUF2 for total equipment found.
- Store a '-' in QTYSGN to signify downrating.

e. Output

None.

f. Interfaces

Called by: LINTST

Calls to: None

g. Arguments

- IDIFF - The difference amount between equipment required and available.
- IFY - The fiscal year index.
- * - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.3 Program Description

a. Identification

Assessment Processor - BLDFIL (SIGN, NRCDYF)

b. Functions

This subroutine selects data from the file created by mode 2 operation and sorts it by fiscal year, LIN, and unit shortage amount. This sort is performed for display purposes for the Shortage and Billpayer Reports.

c. Input

- The mode 2 file (12) is read sequentially.
- Common block XCONTRL.

d. Processing

The processing of BLDFIL is described as follows:

- Confirm that position 148 of the file #12 record contains a '+' for the Shortage Report and a '-' for the Billpayer Report.
- Write the selected record to file #20.
- Extract the year from the record and update the counter for number of records in that year.
- At the end of the input file, sort the file. This will establish the ordering of the Shortage Detail or Billpayer Detail Report.
- Return after sort has completed.

e. Output

Temporary file #20 (report file) of 160 characters. This file is used in DSYXF1 and DSYXF2 to generate Reports #11 and #12.

f. Interfaces

Called by: DSYXF1 ('+', number of records for FY)
DSYXF2 ('-', number of records for FY)

Calls to: FSORT (Fortran Sort Utility)

g. Arguments

- SIGN - Indicator of uprate (+) or downrate (-).
- NRCDY - The number of records read for a fiscal year..

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.4 Program Description

a. Identification

Assessment Processor - CLRBUF (IFY, *)

b. Functions

This subroutine scans the buffer for a match between a given LIN and those present in the buffer. If a match is found for a non-zero balance, the balance for that piece of equipment is adjusted by the adjusted quantity.

c. Input

Common blocks XBUFR, XITMDTA

d. Processing

The processing of CLRBUF is described as follows:

- Search each item sequentially in the buffer table BUFCOD for the applicable LIN. If the UIC for that LIN is blank, then adjust the buffer balance (IBUF3) by the adjusted quantity.
- If the item was not found, return 1.

e. Output

None.

f. Interfaces

Called by: UICTST (fiscal year, return indicator)

Calls to: None

g. Arguments

- IFY - The fiscal year index.
- * - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.5 Program Description

a. Identification

Assessment Processor - DSYBUF

b. Functions

This subroutine displays the contents of the item buffers. This display is report #8, Item Transfer Summary. The contents are displayed separately for each fiscal year.

c. Input

Common blocks XBUFR, XCONTRL

d. Processing

The processing of DSYBUF is described as follows:

- For each fiscal year
 - Call DSYCTL(8) to control headers.
 - If at least one item is in the fiscal year buffer:
 - For each item, compute the balance (IBUFBL) as IBUF1 quantity minus IBUF2 quantity.
 - Write the detail line for shortage LIN's, billpayer LIN's and balance (still short).
 - If no items in the buffer, write a message.
- Call WRCLS to display the classification at the bottom of every page.

e. Output

Report #8, Item Transfer Summary.

f. Interfaces

Called by: MAIN

Calls to: DYSCTL (8)(0)
WRCLS (8)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.6 Program Description

a. Identification

Assessment Processor - DSYCTL (DSYNR)

b. Functions

This subroutine controls the formatting of the detail lines for the Assessment Processor reports. The lines are grouped into blocks and the blocks are grouped into pages.

c. Input

None.

d. Processing

The processing of DSYCTL is described as follows:

- If this routine is called for the first time for a given report, call WRTTL (report #1).
- If the maximum number of lines per block is reached: write a blank line.
- If the maximum number of blocks per page is reached
 - Call WRCLS (report number) to print classification.
 - Call WRTTL (report number, page number) to print headings of following page.
- Return.

e. Output

None.

f. Interfaces

Called by: DSYBUF (8)(Ø)
DSYCT1 (5)
DSYCT2 (6)
DSYCT3 (7)
DSYINP (10)
DSYSM1 (1)
DSYSM2 (2)
DSYSM3 (3)
DSYSM4 (4)
DSYWS (9)
DSYXF1 (11)(Ø)
DSYXF2 (12)(Ø)

Calls to: WRCLS (report number)
WRTTL (report number, page number)

g. Arguments

DSYNR - The report number (value of 1-12)

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.7 Program Description

a. Identification

Assessment Processor - DSYCT1

b. Functions

This subroutine produces Report #5, 7-Year Summary I, for all CCT changes. This report displays the results of the rating of all units before and after application of the CCT changes.

c. Input

Common blocks XCONTRL, XRSULTS

d. Processing

The processing of DSYCT1 is described as follows:

- Call DSYCTL(5) to print headers.
- For each unit rated:
 - Write the detail line displaying unit ID, branch, unit name, and before/after ratings for each year.
 - Call DSYCTL(5) for page formatting.
- Call WRCLS(5) to print run classification footing.

e. Output

Report #5, 7-Year Summary I, CCT Units.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (5)
WRCLS (5)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.8 Program Description

a. Identification

Assessment Processor - DSYCT2

b. Functions

This subroutine produces Report #6, 7-Year Summary II, for all CCT changes. This report displays the results of the dual rating of all units for each fiscal year, including counts of differences in item ratings at each C-level.

c. Input

Common blocks XCONTRL, XRSULTS

d. Processing

The processing of DSYCT2 is described as follows:

- Call DSYCTL(6) to print headers.
- For each year within each unit:
 - Accumulate NP (number of pacing items), NT (total number of items, NNP (number of non-pacing items) for each rating level.
 - Write the detail line displaying unit ID, branch and unit name for first year and fiscal year, pre-CCT rating, ALO, number of pacing items for each rating (and total), number of non-pacing items for each rating (and total) and totals for all items combined.
 - Calls DSYCTL(6) for page formatting.
- Call WRCLS(6) to print run classification footing on last page.

e. Output

Report #6, 7-Year Summary II, CCT Units.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (6)
WRCLS (6)

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g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.9 Program Description

a. Identification

Assessment processor - DSYCT3

b. Functions

This subroutine produces Report #7, 7-Year Summary III, for all CCT changes. This report displays the frequency counts of unit rating changes by change increment amount for each fiscal year.

c. Input

Common block XRSULTS

d. Processing

The processing of DSYCT3 is described as follows:

- Call DSYCTL(7) to print headers.
- For each year within each unit:
 - Compute IDIF as the difference between the first and second rating for each unit.
 - Accumulate number of differences for each rating difference amount (-3, -2...,+3) for each year.
 - Accumulate total number of units for each year.
- Write the detail line displaying the rating change amount (-3 through +3) and the cumulative difference for all the units in each fiscal year.
- Write the total number of units for each fiscal year.
- Call WRCLS(7) to print the run classification footing.

e. Output

Report #7, 7-Year Summary III, CCT Units.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (7)
WRCLS (7)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.10 Program Description

a. Identification

Assessment Processor - DSYINP

b. Functions

This subroutine produces Report #10, User Input. This report displays the input parameters selected by the user to control the selection of units for the 'TRIAL' run.

c. Input

Common block XSELECT

d. Processing

The processing of DSYINP is described as follows:

- Call LSTCTL(10) to print headers.
- Replace any blank parameters with a right-justified zero for display purposes.
- Write the uprate value and downrate values for all of the input parameters.
- Write the run classification footing.

e. Output

Report #10, User Input.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (10)
WRCLS (10)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.11 Program Description

a. Identification

Assessment Processor - DSYSM1

b. Functions

This subroutine produces Report #1, Rating Count Within FY. This report displays the frequency distribution, by count, of unit ratings in each fiscal year. This report will only print for the new activations dataset.

c. Input

Common block XCOUNT

d. Processing

The processing of DSYSM1 is described as follows:

- Call FRQCNT to compute the number of units achieving either a C-0, C-1, C-2, C-3 or C-4 rating in each fiscal year.
- Call DSYCTL(1) to print headers.
- For each rating value, print the total number of units at that rating for each fiscal year.
- Print the cumulative totals of all units.
- Call WRCLS(1) to print the run classification footing.

e. Output

Report #1, Rating Count Within FY.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (1)
FRQCNT
WRCLS (1)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.12 Program Description

a. Identification

Assessment Processor - DSYSM2

b. Functions

This subroutine produces Report #2, Rating Percent Within FY. This report is similar to Report #1, but prints percentages of ratings rather than rating counts. This report will only print for the new activations dataset.

c. Input

Common block XCOUNT

d. Processing

The processing of DSYSM2 is described as follows:

- Call DSYCTL(2) to print headers.
- Utilizing the percentages computed in FRQCNT (as called previously by DSYSM1), print the percentage of units contained in each rating for each fiscal year. For example, if 10 units were rated in FY82 and 4 had a rating of C-3 and 6 had a rating of C-4, then C-3 would show a value of .40 and C-4 would show a value of .60.
- Print the cumulative totals.
- Print the run classification footing.

e. Output

Report #2, Rating Percent Within FY.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (2)
WRCLS (2)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.13 Program Description

a. Identification

Assessment Processor - DSYSM3

b. Functions

This subroutine produces Report #3, 7-Year Summary I, new units. This report displays the results of the ratings of all of the units for each fiscal year.

c. Input

Common blocks XCONTRL, XRSULTS

d. Processing

The processing of DSYSM3 is described as follows:

- Call DSYCTL(3) to print headers.
- For each unit, print the unit ID, branch, name and rating for each of the seven fiscal years.
- Print the run classification footing.

e. Output

Report #3, 7-Year Summary I, New Units.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (3)
WRCLS (3)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.14 Program Description

a. Identification

Assessment Processor - DSYSM4

b. Functions

This subroutine produces Report #4, 7-Year Summary II, for new activation units. This report displays the same unit ratings as Report #3, but also displays the counts of item ratings within the units. This report is similar to Report #6.

c. Input

Common blocks XCONTRL, XRSULTS

d. Processing

The processing of DSYSM4 is described as follows:

- Call DSYCTL(4) to print report headers.
- For each year within each unit:
 - Accumulate NP (number of pacing items), NT (number of total items), and NNP (number of non-pacing items) for each rating level.
 - Write the detail line displaying unit ID, branch and unit name for first year and unit rating, ALO, pacing item rating counts, non-pacing item rating counts and total counts for each rating level for each year.
- Print the run classification footing.

e. Output

Report #4, 7-Year Summary II, New Units.

f. Interfaces

Called by: MAIN

Calls to: DSYCTL (4)
WRCLS (4)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.15 Program Description

a. Identification

Assessment Processor - DSYWS

b. Functions

This subroutine produces Report #9, Worksheet. This report displays the results of the rating of all units for each fiscal year. The ratings are displayed (by FY) for each unit for the base case, trial case, achieved by the trial case and a line with blank ratings for use in identifying the ratings in the next trial case.

c. Input

Common Blocks XCONTRL, XRSULTS

d. Processing

The processing of DSYWS is described as follows:

- Call DSYCTL(9) to print report headers.
- If run type = 'BASE'
 - For every unit ID write a detail line of unit identifying information (first line of unit only) and rating level for each fiscal year for the base case, trial case, achieved level and a blank rating indicator for the next trial case attempt.
- If run type = 'TRIAL':
 - For each unit ID:
 - Check a portion of the IRATGB table set in UICTST to determine whether the parameter file target level was used for the desired level or whether the worksheet file was used. A value of 1 through 4 in IRATGB (Unit ID, 2, Fiscal Year) will generate a '(W)' on the Trial line of the output to indicate the worksheet was used. A value of 5 through 8 will indicate the parameter file and a '(P)' will print.
 - Write the detail line in the same format as the 'BASE' case above.
 - Call WRCLS(9) to print the run classification footing.

e. Output

Report #9, Worksheet Display.

f. Interfaces

Called by: MAIN (difference quantity, fiscal year)

Calls to: DSYCTL (9)
WRCLS (9)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.16 Program Description

a. Identification

Assessment Processor - DSYXF1

b. Functions

This subroutine produces Report #11, Shortage Detail. This report displays the unit and equipment shortages which were a result of the uprating of other units.

c. Input

- File #21 - Temporary sorted input file for reporting.
- Common Blocks XBUFR, XITMDTA, XUNTDTA.

d. Processing

The processing of DSYXF1 is described as follows:

- Call BLDFIL to build a temporary sorted file in reporting sequence in file 21.
- Loop for fiscal year.
- If fiscal year > 7, terminate processing.
- Call DSYCTL(11) to print report headers.
- If the number of records for current fiscal year is zero, then print message and move to next fiscal year.
- Read the shortage data from file 21.
- If fiscal year has changed
 - Backspace to previous record (i.e., to before current record).
 - Write totals for previous year.
 - Call WRCLS(11) to print run classification.
 - Branch to top of routine to begin loop for a new fiscal year.
- If LIN has changed:
 - Write a detail line containing the number of items of that equipment in that unit.
 - Call DSYCTL(11) to handle page formatting.
- Else,
 - Write totals for that LIN.
 - Write the run classification footing.
 - Call DSYCTL(9).
 - Call DSYCTL(11).
 - Write a detail line containing LIN, equipment name, unit ID, unit name and the number of items of the current LIN.
- Write totals for the LIN.

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- Write the run classification footing.
- Return.

e. Output

Report #11, Shortage Detail Report.

f. Interfaces

Called by: MAIN

Calls to: BLDFIL ('+', # records in FY)
DSYCTL (11)(g)
WRCLS (11)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.17 Program Description

a. Identification

Assessment Processor - DSYXF2

b. Functions

This subroutine produces Report #12, Billpayer Detail. This report displays the unit by unit billpayer items of equipment which resulted from the uprate of the units.

c. Input

- File #21 - Temporary sorted input file for reporting.
- Common Blocks XBUFR, XI'IMDTA, XUNTDTA.

d. Processing

The processing of DSYXF2 is described as follows:

- Call BLDFIL to build a temporary sorted file in reporting sequence in file #21.
- Loop for fiscal year.
- If fiscal year > 7, terminate processing.
- Call DSYCTL(12) to print report headers.
- If the number of billpayer items for current fiscal year is zero, print a message and move to next fiscal year.
- Read the billpayer data from file #21.
- If fiscal year has changed:
 - Backspace to before current record.
 - Write totals for the previous fiscal year.
 - Call WRCLS(12) to print run classification footing.
 - Branch to top of loop to begin new fiscal year processing.
- If new LIN:
 - Write a detail line containing the number of items of previous LIN in the unit.
 - Call DSYCTL(12) to handle page formatting.
- Else,
 - Write LIN detail line for totals.
 - Write run classification footing and page headers.
 - Write a detail line containing item number, item name, unit ID, unit name and the count of items for current LIN.
- Write totals for the LIN.
- Write run classification footing.
- Return.

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e. Output

Report #12, Billpayer Detail Report

f. Interfaces

Called by: MAIN

Calls to: BLDFIL ('-', # records in FY)
DSYCTL (11)(Ø)
WRCLS (11)

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.18 Program Description

a. Identification

Assessment Processor - FILEBC

b. Functions

This subroutine writes the results of the 'BASE' case rating of all units to the Base Case File. The ratings are for each fiscal year and include a count on the number of pacing items and non-pacing items.

c. Input

Common Blocks XCONTRL, XRSULTS

d. Processing

The processing of FILEBC is described as follows:

- For every unit ID:
 - For every year, compute the number of pacing and non-pacing items.
 - Write the unit number, unit ID (from the routine SAVID), QUAL (the Branch stored in SAVID), TEXT (the unit name stored in SAVID), rating, number of pacing items and number of non-pacing items to file #16.
- Return.

e.. Output

File #16, Base Case File (MTOE*AP1BAS21).

f. Interfaces

Called by: MAIN

Calls to: None

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.19 Program Description

a. Identification

Assessment Processor - FILEWS

b. Functions

This subroutine stores the Worksheet File. This file contains the results of the rating of all units for each fiscal year. The file also contains the results from the 'BASE' case run and provides an extra line for the user to enter the unit ratings to be used in the next run.

c. Input

- File #16, Base Case File stored by FILEBC routine (MTOE*AP1BAS21).
- Common Blocks XCONTRL, XRSULTS.

d. Processing

The processing of FILEWS is described as follows:

- If run type is 'BASE' case, write a detail line of unit number, unit ID, base case rating, trial case rating and achieved rating. For the base case, all three ratings will always be the same.
- If run type is 'TRIAL', for every unit:
 - Read file 16 to capture the rating of that unit.
 - Write the 'BASE:' detail line containing the rating from file 8.
 - For each fiscal year, capture the 'W' or 'P' indicator from IRATGB (unit #, 2, year). The 'W' indicates that the rating originates from the worksheet and will be represented by an IRATGB value of 1 through 4. The 'P' indicates that the rating originates from the run control target level parameters and is represented by a value of 5 through 8. The 'W' or 'P' indicator may vary by unit and/or by fiscal year within an individual unit.
 - Write the 'TRIAL:' ratings to the record of four detail lines for the current unit. The indicator will be written one position after the rating level.
 - Write the 'ACHVD': ratings to the next detail line.
 - Write the 'NEXT': blank rating line.
 - A set of four lines is written for each unit.
- Return.

e. Output

File #8, Worksheet File (MTOE*AP1WOT21).

f. Interfaces

Called by: MAIN

Calls to: None

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

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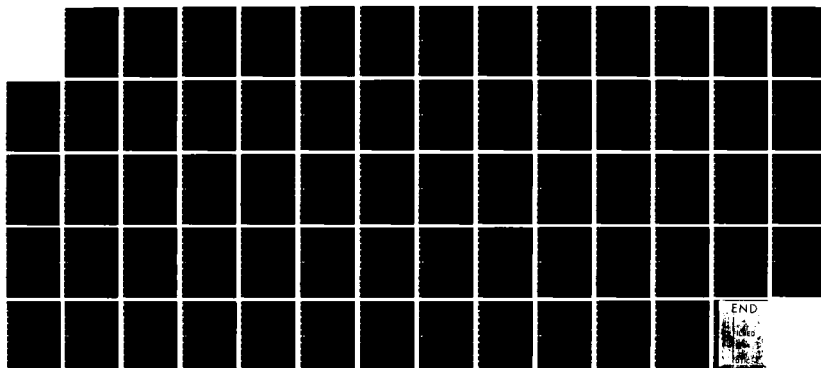
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PROGRAM MAINTENANCE MANUAL(U) TECHNASSOCIATES INC
ROCKVILLE MD W T HARKEY ET AL. OCT 83 CAA-D-83-3-VOL-4
MDA903-83-C-0277

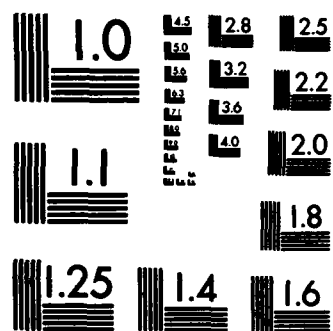
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MICROCOPY RESOLUTION TEST CHART
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2.6.20 Program Description

a. Identification

Assessment Processor - FRQCNT

b. Functions

This subroutine calculates the frequency distribution of unit ratings by fiscal year. The calculation is both by number (used in Report #1) and by percentage (used in Report #2) for each year.

c. Input

Common Blocks XCOUNT, XRSULTS

d. Processing

The processing of FRQCNT is described as follows:

- For each year (1-7):
 - For each unit (1-NUIC):
 - For each rating (0-4), total the number of ratings of each type and save into ICNT table.
- For each year (1-7):
 - For each rating (0-4), convert the totals computed above into percentages and save into FRQ table.
- Return.

e. Output

None.

f. Interfaces

Called by: DSYSM1

Calls to: None

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.21 Program Description

a. Identification

Assessment Processor - GENBUF (IDIFF, IFY)

b. Functions

This subroutine creates the tables BUFCOD, BUFNAM, IBUF1, IBUF3 and IBUFEN for the incremental quantities generated in subroutine LINTST. These quantities represent the difference between the quantity on hand and the quantity required to meet the directed C-rating.

c. Input

Common Blocks XBUFR, XIITMDTA

d. Processing

The processing of GENBUF is described as follows:

- Search table BUFCOD for all LIN's encountered thus far.
- If LIN has not yet been encountered, then add as a new item as follows:
 - Move the LIN to BUFCOD (index #, fiscal year).
 - Move the LIN name to BUFNAM (index #, fiscal year).
 - Move the difference quantity to IBUF1 (index #, 1, fiscal year) and IBUF3 (index #, fiscal year).
 - Move a '1' to IBUF1 (index #, 2, fiscal year).
 - Preserve adjusted quantity and sign.
 - Update table index # by 1.
- If LIN has already been encountered, then update the tables for this LIN as follows:
 - Add the difference quantity to IBUF1 and IBUF3.
 - Add one to IBUF1 (index #, 2, fiscal year).
 - Preserve the adjusted quantity and sign.
- Return.

e. Output

None.

f. Interfaces

Called by: LINTST

Calls to: None

g. Arguments

- IDIFF - The difference amount between quantity available and quantity required.
- IFY - The fiscal year index.

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.22 Program Description

a. Identification

Assessment Processor - IOCTL (MODE)

b. Functions

This subroutine selects the input and output files used for processing based on the mode of operation. The selected files are passed by common block to the reading and writing subroutines.

c. Input

Common Blocks XCONTRL, XIOFILE, XRTGCTL

d. Processing

The processing of IOCTL is described as follows:

- If mode = 0, move '7' to input file number and '10' to output file for the 'BASE' case and '13' to the input file number and '15' to the output file number for the 'TRIAL' case.
- If mode = 1:
 - Move 10 to input file number.
 - Move 11 to output file number.
- If mode = 2:
 - Move 11 to input file number.
 - Move 12 to output file number.
- If mode = 3:
 - Move 12 to input file number.
 - Move 13 to output file number.

e. Output

None.

f. Interfaces

Called by: MAIN (0)(1)(2)(3)

Calls to: None

g. Arguments

- MODE - The type of processing (update, downrate, or rerate). A value of 1-3.

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h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.23 Program Description

a. Identification

Assessment Processor - LINTST (MODE, LEVEL, IFY, *)

b. Functions

This subroutine compares the quantity on hand to the quantity needed to meet the C-rating directed for the unit. If the two quantities are the same, the next item is tested. If a difference is found, it is passed to the buffer subroutine (GENBUF) for storage.

c. Input

- Calls RDRCD (MODE, *, *) to read the TAEDP records.
- Common Blocks XITMDTA, XRTGCTL.

d. Processing

The processing of LINTST is described as follows:

- If mode = 1, perform unit uprate.
 - Call RDRCD (1, *400, *500) to read TAEDP record.
 - If required quantity > 20, then compute IDIFF.
 - Else, call TBLQTY (Aircraft indicator, required quantity, minimum quantity, level) to compute the minimum quantity on hand required. Compute IDIFF = minimum quantity less projected quantity.
 - Call GENBUF (IDIFF, fiscal year) to update buffer.
 - Store difference in rating in ADJRTG and a '+' in RTGSGN.
 - Increase the quantity on hand by IDIFF and update the item rating (LINRTG).
 - Call WRRCD to write the item and go to next item.
- If mode = 2, perform unit downrate.
 - Call RDRCD (2, #400, #500) to read the TAEDP record.
 - If difference between current rating and desired rating is less than zero:
 - Compute the buffer adjustment.
 - Call BALBUF (difference quantity, year, #) to adjust the tables in the buffer for this LIN.
 - Store rating difference in ADJRTG and RTGSGN as '+'.
 - Set item rating to target rating.
 - Call WRRCD to write the item.
 - Return.
 - At EOF, Return 1.

e. Output

Calls WRRCD to write an item record to the output file specified in IOCTL.

f. Interfaces

Called by: UICTST (mode, target level, year, *)

Calls to: BALBUF (difference quantity, year, *)
GENBUF (difference quantity, year)
RDRCD (1, *, *) (2, *, *)
TBLQTY (Aircraft Ind., Required Quantity,
Minimum Quantity, Target level)
WRRCD

g. Arguments

- MODE - The type of processing (uprate, downrate, or rerate). A value of 1-3.
- LEVEL - The C-rating level.
- IFY - The fiscal year index.
 - * - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.24 Program Description

a. Identification

Assessment Processor - PAGADV

b. Functions

This subroutine advances the printer to a new page after all of the Assessment Processor reports have been written, so that the termination messages will print on a separate page.

This subroutine is called by MAIN and contains only a carriage control command to advance the printer to a new page.

No other information is required for this subroutine.

2.6.25 Program Description

a. Identification

Assessment Processor - PIKUNT (MODE, LEVEL, *)

b. Functions

This subroutine tests the characteristics of each unit read from the TAEDP against the criteria set by the Run Control Parameters input by the user. If the criteria are met, control is passed to the uprate/downrate portion of the calling program; otherwise, the unit is skipped.

c. Input

Common Blocks XSELECT, XUNTDFA

d. Processing

The processing of PIKUNT is described as follows:

- If DAMPL selection was specified, check the unit's DAMPL against range specified.
- If SRC selection was specified, check for a match on the SRC.
- If ALO selection was specified, check for a match on the ALO.
- If BR (Branch) selection was specified, check for a match on the Branch.
- If MACOM selection was specified, check for a match.
- If the unit met all necessary criteria, Return, else Return 1.
- Note: The above criteria used in selection are dependent on whether it is unit uprate (mode 1) or unit downrate (mode 2). Two values, one for each mode, are input by the user.

e. Output

None.

f. Interfaces

Called by: UICTST (mode, target level, *)

Calls to: None

g. Arguments

- MODE - The type of processing (uprate, downrate, or rerate). A value of 1-3.
- LEVEL - The C-rating level.
- * - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.26 Program Description

a. Identification

Assessment Processor - RDRCD (MODE, *, *)

b. Functions

This subroutine reads the input file specified by the routine IOCTL to read the unit and equipment data in a modified TAEDP record.

c. Input

- Reads input record of unit and LIN data. This record will be read from either file #7, #10, #11 or #12.
- Common Blocks XCONTRL, XIOFILE, XITMDTA, XUNTDTA.

d. Processing

The processing of RDRCD is described as follows:

- Read the record for all of the unit data elements and item data elements.
- Test for end-of-unit or end-of-file condition.

e. Output

None.

f. Interfaces

Called by: LINTST (mode 1, *, *)
UICRTG (mode 0, *, *)
UICTST (mode 1, *, *) (2, *, *) (3, *, *)
XFRDTA (mode 1, *, *) (2, *, *)

g. Arguments

- MODE - The type of processing (uprate, downrate, or rerate). A value of 1-3.
- * - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.27 Program Description

a. Identification

Assessment Processor - RDWS (IFY, NOWLVL, NXTLVL)

b. Functions

This subroutine reads the unit rating data from the Worksheet File generated by the routine FILEWS and subsequently edited by the user to perform another trial run and redistribution.

c. Input

- File #9, Worksheet File (MTOE*AP1WIN21).
- Common Block XUNTDTA.

d. Processing

The routine reads the record detail line for the 'TRIAL' ratings and the fourth detail line for the user-input ratings for each unit.

If the unit number read is the desired unit, place the trial rating in the NOWLVL variable and the user input ratings in the NXTLVC for the fiscal year passed to the routine.

e. Output

None.

f. Interfaces

Called by: UICTST (fiscal year, current rating, new rating)

Calls to: None

g. Arguments

- IFY - The fiscal year index.
- NOWLVL - The current rating of the unit.
- NXTLVL - The user-selected rating level to be achieved.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.28 Program Description

a. Identification

Assessment Processor - SAVID

b. Functions

This subroutine preserves all of the unit information into tables by the original alphanumeric sequence (POOLID) and maintains a count of the number of units. These tables are later referenced during report generation.

c. Input

Common Blocks XCONTRL, XRSULTS, XUNTDATA

d. Processing

The processing of SAVID is described as follows:

- If tables have not yet been filled for current unit:
 - Preserve the unit ID in the CODE table.
 - Preserve the unit name in the TEXT table.
 - Preserve the branch ID in the QUAL table.
 - Update the flag for highest unit index number.
- Store the ALO of the unit by FY in ALOFY.

e. Output

None.

f. Interfaces

Called by: UICTRG

Calls to: None

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.29 Program Description

a. Identification

Assessment Processor - SAVRTG

b. Functions

This subroutine preserves the unit rating data for subsequent report generation into the table IRATGB.

c. Input

Common Blocks XCONTRL, XRSULTS, XRTGCTL, XUNTDTA

d. Processing

The processing of SAVRTG is described as follows:

- Preserve the C-rating into IRATGB, using subscripts of (unit index #, rating pass indicator, fiscal year).
- If the units received a single rating, store the number of pacing items and total item count into IRATGB table. The rating pass indicator will hold a value of between 3 and 7 for the five pacing rating counts and 8 to 12 for the five total rating counts.
- If the units had a dual rating, the difference counts are stored into IRATGB.

e. Output

None.

f. Interfaces

Called by: URATE

Calls to: None

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.30 Program Description

a. Identification

Assessment Processor - TBLQTY (ACFT, IREQD, IMIN, LEVEL)

b. Functions

This subroutine identifies the required minimum quantity on-hand for a specified authorized quantity and C-rating. In addition, provision is made for a minimum quantity on hand for the lowest rating (C-4). This minimum is set at 40% of the authorized quantity rounded down to the nearest integer. The quantities utilized have been set in AR 220-1.

c. Input

None.

d. Processing

The subroutine captures the minimum quantity required (IMIN) by using the desired C-rating level and quantity required to access a large table of quantity values. The result of IMIN is passed to the calling subroutine as a parameter.

e. Output

None.

f. Interfaces

Called by: LINTST

Calls to: None

g. Arguments

- ACFT - Aircraft indicator flag.
- IMIN - The minimum quantity allowed on-hand.
- IREQD - The required quantity.
- LEVEL - The C-rating level.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.31 Program Description

a. Identification

Assessment Processor - TBLRTG (ACFT, IREQD, IONHD, ICRATG)

b. Functions

This subroutine establishes the C-rating of a unit's line item using a table look up rather than a percentage threshold. This routine is called whenever the quantity on hand to be rated is 20 items or less. A separate look up value is provided for quantities of aircraft reported at a C-rating of 3. This look up table is extracted from AR 220-1, Table 3-1.

c. Input

None.

d. Processing

The processing of TBLRTG is described as follows:

- For rating level '1' and '2', generate a rating of '1' if the table value is not greater than the quantity on-hand, else, continue.
- For aircraft items
 - If the table value from column 5 is not greater than quantity on hand, generate a rating of 3.
 - Else generate a rating of 4.
- For non-aircraft items
 - If the table value from column 4 is not greater than the quantity on-hand, generate a rating of 3.
 - Else generate a rating of 4.
- Return.

e. Output

None.

f. Interfaces

Called by: UICRTG

Calls to: None

g. Arguments

- ACFT - Aircraft indicator flag.
- IMIN - The minimum quantity allowed on-hand.
- IREQD - The required quantity.
- LEVEL - The C-rating level.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.32 Program Description

a. Identification

Assessment Processor - UICRTG

b. Functions

This subroutine computes the ratings of each individual item contained in each unit and aggregates the ratings into an overall rating for the unit.

c. Input

- Calls RDRCD to read an equipment item record.
- Common Blocks XCONTRL, XI'TMDTA, XRTGCTL.

d. Processing

The processing of UICRTG is described as follows:

- Call RDRCD (mode, *, *).
- If this is the first record of a new unit, call SAVID to preserve the identifying information for the new unit.
- For 1 through PSMAX (value of 1 or 2 set in MAIN)
 - If first rating pass, set required quantity (IRQMT) for rating purposes to the quantity required read from the record in RDRCD.
 - If not the first pass and the item change quantity = zero, there is no need to rerate the item; else, set required quantity (IRQMT) to the quantity required, plus the change quantity.
 - For those items where ERC = A and both the required quantity and projected quantity are greater than zero.
 - If required quantity > 20, then compute the percentage of the quantity required to the quantity projected to be on hand.
 - If the percentage > = 90, rating is 1
 - Else, if > = 80, rating is 2
 - Else, if > = 65, rating is 3
 - Else rating is 4.
 - If required quantity 20 or less, call TBLRTG to compute the rating.
 - Update the table for the total number of items with each rating level (NT) and for the pacing items with each rating level (NP) when PACR = 'Y'.
 - Store the LIN rating for later use in WRRCD.
 - Else set the LIN rating to zero.
 - Call WRRCD to store the rating result.

- At end of unit, call URATE to rate the unit based on all of the LIN ratings.
- At end of file, compute rating of final unit and return.

e. Output

Calls WRRCD to store the item rating result.

f. Interfaces

Called by: MAIN

Calls to: RDRCD (mode, *, *)

SAVID

TBLRTG (Aircraft flag, minimum quantity,
projected on hand quantity, C-rating)

URATE

WRRCD

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.33 Program Description

a. Identification

Assessment Processor - UICTST (MODE)

b. Functions

This subroutine compares the actual rating of a unit with the rating directed by the input and calls the LINTST subroutine to make the necessary adjustments.

c. Input

- Calls RDRCD to read the unit and item data.
- Common Blocks XCONTRL, XIOFILE, XITMDTA, XRSULTS, XRTGCTL, XSELECT, XUNTDTA.

d. Processing

The processing of UICTST is described as follows:

- If mode = 1, execute unit uprate.
 - Call RDRCD to read unit and item data.
 - Call RDWS to read the worksheet file.
 - If the rating input by the user in the 'NEXT' line of the worksheet is less (higher) than the current rating.
 - Call LINTST to adjust the equipment to meet the required rating level.
 - Preserve the level in IRATGB table.
 - Else, call PIKUNT to use the run control parameters to select the unit rating information.
 - Call LINTST to adjust the equipment and call XFRDTA to write the remaining items for the unit if selection criteria is not met.
- If mode = 2, execute unit downrate. Repeat the same procedure as mode 1 but for equipment downrate. The only difference lies in the 'MODE' parameter passed to LINTST and RDRCD.
- If mode = 3
 - Call RDRCD.
 - If the adjusted quantity > 0, call CLRBUF to reduce the buffer by the adjusted quantity.
 - Adjust the LIN rating.
 - Call WRRCD to rewrite the record.
- Return.

e. Output

Calls WRRCD to preserve the item rating information.

f. Interfaces

Called by: MAIN (mode)

Calls to: CLRBUF (fiscal year, *)
LINTST (mode, requested level, year, *)
PIKUNT (mode, current level, *)
RDRCD (mode, *, *)
RDWS (year, current level, requested level)
WRRCD
XFRDTA (*)

g. Arguments

- MODE - The type of processing (uprate, downrate, or rerate). A value of 1-3.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.34 Program Description

a. Identification

Assessment Processor - URATE

b. Functions

This subroutine computes the overall C-rating for a unit and calls SAVRTG to save the rating.

c. Input

Common Block XRTGCTL

d. Processing

The processing of URATE is described as follows:

- If unit did not have any LIN's (i.e., unit is activated in a future year of the planning period), set all totals and rating to zero. Call SAVRTG to save the zero rating and return.
- For single (PASMAY = 1) or dual (PASMAY = 2) rating
 - If all of the pacing items have a rating of C-1 and at least 90% of all items in the unit have a C-1 rating, then unit rating is C-1.
 - If all of the pacing items have a rating of C-1 or C-2 and at least 90% of all items in the unit have a C-1 or C-2 rating, then unit rating is C-2.
 - If all of the pacing items have a rating of C-1, C-2 or C-3 and at least 90% of all items in the unit have a rating of C-1, C-2, or C-3, then unit rating is C-3.
 - If none of the above three cases is true, then unit rating is C-4.
- Call SAVRTG to save the unit rating.
- Return.

e. Output

None.

f. Interfaces

Called by: UICRTG

Calls to: SAVRTG

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g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.35 Program Description

a. Identification

Assessment Processor - WRCLS (DSYNR)

b. Functions

This subroutine writes the page classification as a footing centered on the last line of every page.

c. Input

Common Blocks XCONTRL, XDSYWITH

d. Processing

The subroutine WRCLS simply checks the width of the detail line for the report number passed to the routine and prints the run classification, normally 'CLASSIFIED' centered on the final line of the page.

e. Output

The final line of every report.

f. Interfaces

Called by: DSYBUF (8)
 DSYCTL (report number)
 DSYCT1 (5)
 DSYCT2 (6)
 DSYCT3 (7)
 DSYINP (10)
 DSYSM1 (1)
 DSYSM2 (2)
 DSYSM3 (3)
 DSYSM4 (4)
 DSYWS (9)
 DSYXF1 (11)
 DSYXF2 (12)

Calls to: None

g. Arguments

- DSYNR - The report number (a value of 1-12).

CAA-D-83-3

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.36 Program Description

a. Identification

Assessment Processor - WRHDG (DSYNR)

b. Functions

This subroutine prints the column headings for all 12 Assessment Processor reports.

c. Input

Common Blocks XBUFR, XCONTRL, XRSULTS

d. Processing

The subroutine WRHDG prints the appropriate column headings for the report number specified in the passing parameter. For formats of the column headings, see the sample report formats at the end of this section.

e. Output

The column headings for all of the reports.

f. Interfaces

Called by: WRTTL (report number)

Calls to: None

g. Arguments

- DSYNR - The report number (a value of 1-12).

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.37 Program Description

a. Identification

Assessment Processor - WRRCD

b. Functions

This subroutine writes the data for each item of equipment in a unit to the output file. The output file number is specified in the routine IOCTL.

c. Input

Common Blocks XCONTRL, XIOFILE, XITMDTA, XRTGCTL, XUNTDTA

d. Processing

The subroutine WRRCD writes a record for each item of equipment. This record contains identifying information for the unit and LIN as well as the various quantities (required, authorized, change, projected) and rating information. The file number will be as follows:

- File 10 - Base case, mode 0
- File 15 - Trial case, mode 0
- File 11 - Mode 1
- File 12 - Mode 2
- File 13 - Mode 3 (final output file)

e. Output

As stated above.

f. Interfaces

Called by: LINTST
UICRTG
UICTST
XFRDTA

Calls to: None

g. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.38 Program Description

a. Identification

Assessment Processor - WRTTL (DSYNR, NPAGE)

b. Functions

This subroutine prints the page headers for all 12 Assessment Processor reports.

c. Input

Common Blocks XCONTRL, XDSYWTH

d. Processing

The processing of WRTTL is described as follows:

- The header of 'UNIT EQUIPMENT READINESS' will print on the top of every report.
- The report title will be selected according to the report number passed to the routine.
- If Dataset = 'NEWUNT', the line 'ACTIVATED UNITS' will print, else, the line 'CCT UNITS' will print as the next header.
- Either 'BASE CASE' or 'TRIAL CASE' will print next.
- Call WRHDG (report #) to print column headings.

e. Output

The page headings for each report.

f. Interfaces

Called by: DSYCTL (report number)

Calls to: WRHDG (report number)

g. Arguments

- DSYNR - The report number (value of 1-12).
- NPAGE - The report page number.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

2.6.39 Program Description

a. Identification

Assessment Processor - XFRDTA (*)

b. Functions

This subroutine transfers data from the input file to the output file without any modification. It is called to transfer any records which do not require any redistribution.

c. Input

- Call RDRCD to read the appropriate input file.
- Common Block XRTGCTL.

d. Processing

This routine simply calls RDRCD continuously until either a new unit or EOF is encountered. A normal return is executed at end of unit, with a return 1 executed at end of file. For every record read, the routine WRRCD is called to write the record.

e. Output

Calls WRRCD to write to the appropriate output file.

f. Interfaces

Called by: UICTST (*)

Calls to: RDRCD (mode, *, *)
WRRCD

g. Arguments

* - Represents a numbered return in the calling routine.

h. Tables and Items

Please refer to Table 2-6 for the Data Dictionary.

SECTION 3. ENVIRONMENT

3.1 Equipment Environment

The E-DATE Model is resident on the Univac 1100/62 Timesharing Multi-Processing System at the Logistics Evaluation Agency.

3.2 Support Software

The E-DATE Model has been developed utilizing FORTRAN '77.

3.3 Data Base

The major data base utilized by the model is the Total Army Equipment Distribution Program (TAEDP) System. The TAEDP data base provides information relative to the force structure, priorities within a force, and equipment to be procured, distributed, maintained, and supported to sustain the force. TAEDP also projects actual equipment densities (current and planned) during the transition of equipment through modernization. Another feature of TAEDP, especially important to the E-DATE Model is the provision for unit snapshots at specified intervals for a seven-year period (current, budget, and POM years).

The TAEDP data base undergoes preprocessing at the Logistics Evaluation Agency (LEA) to add the pacing item indicators to the record. This information is critical to the ratings of units in the Assessment Processor consistent with the guidelines set forth in AR 220-1.

The Tape Processor provides the user with the ability to select only those TAEDP units to be activated in the first year of the planning period; or, alternatively, those units affected by equipment changes as described in the Consolidated Change Table (CCT). An additional provision is made to allow the user to select on both criteria in one run. The file containing those units to be activated in the first fiscal year is created and maintained by the user through the text editor. The Consolidated Change Table (CCT) Data is read from a tape prepared by HQ TRADOC and is identified as the "TOE Substantive Changes Impact Format (IMPMAS)". A new CCT file will be received approximately once every six months.

The File Processor utilizes the Activated unit and CCT Unit Files and creates a Selected Units File. This file contains data for the overall planning period for those units activated in the designated activation year, or, in the case of CCT units, those units associated with a particular MACOM.

The Assessment Processor input is the set of selected unit files generated by the File Processor. In general, all activation years for the planning period will be of interest and provision is made to execute the Assessment Processor for each activation year in turn. The Assessment Processor operates in two distinctively different modes of processing based upon the run parameters. In one method of processing, the 'BASE' case, the processor generates unit ratings based upon the input data provided by the File Processor. In the other method of operation, the 'TRIAL' case, the processor operates on output from its own 'BASE' case. In this method, the Assessment Processor first redistributes unit equipment assets based upon user inputs supplied as a 'Worksheet' file and a set of redistribution parameters. Following the redistribution, the Processor carries out a unit rating on the redistributed assets, (as in the 'BASE' case) to determine the actual ratings achieved by the redistribution process. Since the 'TRIAL' case always uses a 'BASE' case set of data for input, the 'BASE' case must always be executed before a 'TRIAL' case is attempted.

3.3.1 General Characteristics

The following files are utilized by the E-DATE Model. Many of the files may exist for each of seven fiscal years. These files will be designated with a "<1>...<7>" for the last position of the file name to show that the name varies according to the fiscal year represented.

- **TAEDP Data**

This file contains the TAEDP data extract tapes, as originally generated by the Depot System Command, and modified by the Logistics Evaluation Agency (LEA) to include pacing item (AR 220-1) and aircraft item flags.

The TAEDP data extract tapes must be produced as unlabeled, 9 track, 1600 BPI, ASCII character set and quarter-word sensitive.

The tapes are identified as file MTOE*MTO#3#41.

- **First Year Activated Unit List**

The processor requires the identification, by UIC, of each unit activated in the first year of the planning cycle. The list is a user input based on Structure and Composition System (SACS) data. Only the data for the first year is needed since the TAEDP A-record sequence provides the information for subsequent years. The activated unit list is prepared as a mass storage file with one line for each

unit ID (six-characters). The file is identified by the Tape Processor as MTOE*TP1FYA00.

- Consolidated Change Table (CCT) Data

The CCT data inputs to the Tape Processor are an intermediate product from files prepared by the HQ TRADOC in the course of generating the Consolidated Change Table (CCT).

The CCT data extract tapes must be produced as unlabeled, 9 track, 1600 BPI, ASCII character set and quarter-word sensitive.

The tapes are identified as file MTOE*TP1SRC00 by the Tape Processor.

- Activated Unit File

This file is one of two major outputs from the Tape Processor and contains data on units activated during the seven-year planning period. The file is identical to the format of the TAEDP record except for the insertion of a '1' in column 13 of each A-record.

This file is also utilized as one of the two input files to the File Processor and is identified as MTOE*TP1NEW40 and resides on mass storage.

- CCT Unit File

This file is the second of two major outputs from the Tape Processor and contains data on units affected by the CCT changes in the seven-year planning period. The output format is identical to the format of the TAEDP record except for the insertion of a '1' in column 14 of each A-record.

This file is also utilized as the second of the two input files to the File Processor and is identified as MTOE*TP1CCT00 and resides on mass storage.

- Selected Units File

This file is the principal output from the File Processor and contains data for the overall planning period for those units activated in the designated activation year or in the case of CCT units, those units associated with a particular MACOM.

This file is also utilized as the principal input to the 'BASE' case of the Assessment Processor. The file resides on mass storage and is identified as follows:

CCT file - MTOE*FP1PIK4Ø
New Activation - MTOE*FP1PIK41<1>...<7>

- Skipped Items File

This file contains all units in the File Processor where an assets record (C-Record) was present without a requirements record (B-Record). This file is not used by the Assessment Processor but is generated for historical purposes and may be examined by the user via the CRT or printed to hardcopy.

This file is identified as MTOE*FP1SKP4Ø for CCT units and "MTOE*FP1SKP4<1>...<7>" for new activations.

- Base Case File

Each time the Assessment Processor is run for the 'BASE' case involving activated units, it generates a file which contains the ratings of the units for each fiscal year. This file is then utilized by the processor during 'TRIAL' case runs.

This file is resident on mass storage and will be identified as MTOE*AP1BAS2<1>...<7>.

- Worksheet File

Each time the Assessment Processor is run involving activated units it generates a file which contains the ratings of the units for the 'BASE' case, 'TRIAL' case and 'NEXT' case. This file, and the line for 'NEXT' case specifically is utilized by the user to select ratings for units designated for uprate and downrate. The file is then referenced by the processor during 'TRIAL' case runs.

The file is resident on mass storage and is identified as MTOE*AP1WIN2<1>...<7>.

- Item Rating File

This file is produced by the Assessment Processor and contains, for each unit by fiscal year, the rating of each item of equipment in the unit. This file is used to generate the rating for an entire unit by accumulating the rating of each item of equipment. This file is also utilized to generate the Shortage Detail and Billpayer Detail Reports.

The file is resident on mass storage and is identified as follows:

CCT Units (Base Case) - MTOE*AP1IRB4Ø
New Units (Base Case) - MTOE*AP1IRB4<1>...<7>
New Units (Trial Case) - MTOE*AP1IRT4<1>...<7>

3.3.2 Organization and Detailed Description

The description of the layout of every file described in Section 3.3.1, General Characteristics, is provided in this section. The files are listed in the same sequence as Section 3.3.1 and represent the operational sequence of the three processors within the model.

TAEDP Data

Record Length: 239 characters
Storage Medium: Magnetic Tape
Processors Used: Tape

Three formats are presented for this file due to the varying formats of each record type (A, B, C). Only those fields used in the model are identified.

<u>NAME</u>	<u>POSITIONS</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
(A-record)			
CTLLVL	1-6	A6	Unit ID
MACOM	7-12	A6	Major Command
Not Used	13-33		
TYP-RCD-CD	34	1A	Record Type (A, B, or C)
Not Used	35-45		
FY	46-47	A2	Fiscal Year
Not Used	48-64		
DAMPL	65-69	A5	Army Priority
Not Used	70-109		
Unit Type	110	A1	Unit Type ('1' = TOE unit)
Not Used	111-123		
Unit Name	124-144	A21	The Description of the Unit
Not Used	145-165		
BR Unit CD	166-167	A2	Unit Branch
Not Used	168-184		
SRC	185-196	A12	SRC Code
(B-record)			
CTLLVL	1-6	A6	Unit ID
MACOM	7-12	A6	Major Command
LIN	13-20	A8	Line Item Number
ERC	21	A1	Equipment Readiness Code
Not Used	22-35		

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LIN NOMEN	36-57	A22	Name of Equipment
Not Used	58-127		
Fiscal Year(7)	128-129	A2	Seven Fiscal Years
	144-145		
	160-161		
	176-177		
	192-193		
	208-209		
	224-225		
RQR-QTY	130-136	I7	Required Quantity
	146-152		
	162-168		
	178-184		
	194-200		
	210-216		
	226-232		
AUTH-QTY	137-143	I7	Authorized Quantity
	153-159		
	169-175		
	185-191		
	201-207		
	217-223		
	233-239		

The C-record is identical to the B-record except for the following items:

- National Stock Number (A13) appears in columns 21-33.
- National Stock Number Name (A22) is in columns 36-57.
- Projected Quantity On Hand replaces Required Quantity.
- Quantity On Hand (I7) appears in columns 233-239.
- Authorized Quantity does not appear.

FIRST YEAR ACTIVATED UNIT LIST

Record Length: 6 characters
Storage Medium: Mass Storage
Processors Used: Tape

This file contains the unit ID in positions 1-6.

CONSOLIDATED CHANGE TABLE DATA

Record Length: 39 characters
Storage Medium: Magnetic Tape
Processors Used: Tape

<u>NAME</u>	<u>POSITIONS</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
Not Used	1-11		
SRC	12-20	A9	Self-explanatory
LIN	21-26	A6	Line Item Number
CCTTYP	29	A1	A, B or C
CHGNRS	30-33	I4	Change Amount
CHGLTR	34	A1	Least significant character of CHGNRS
CHGBAL	35-39	I5	Final Equipment Balance

ACTIVATED UNIT FILE

Record Length: 239 characters
Storage Medium: Mass Storage
Processors Used: Tape, File

This file exists in the identical format to the TAEDP Data except for a '1' in position 13 to indicate that the units were selected from new activations.

CCT UNIT FILE

Record Length: 239 characters
Storage Medium: Mass Storage
Processors Used: Tape, File

This file exists in the identical format to the TAEDP Data except for a '2' in position 14 to indicate that the units were selected from the CCT.

SELECTED UNITS FILE

Record Length: 155 characters
Storage Medium: Magnetic Tape
Processors Used: Tape, File

<u>NAME</u>	<u>POSITIONS</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
Fiscal Year	1-2	I2	Fiscal Year
IUNT	4-7	I4	Unit Count
UMACOM	9-14	A6	Major Command
UBR	16-17	A2	Unit Branch
UIC	19-24	A6	Unit ID
UNAME	26-46	A21	Unit Name
UDAMPL	48-52	I5	Priority

USRC	54-62	A9	Unit SRC
UALO	64	I1	Unit ALO
Fiscal Year	66-67	I2	Effective Date Year
LIN	69-74	A6	Line Item Number
LINNM	76-97	A22	LIN Name
ERCFY	99	A1	Index for ERC
SYMBOL (PACR)	101	A1	Flag for PACR
SYMBOL (ACFT)	103	A1	Flag for ACFT
CUMRQD	105-111	I7	Quantity Required
CUMATH	113-119	I7	Quantity Authorized
ICHG	121-127	I7	Change Amount
CUMPRJ	129-135	I7	Quantity Projected
Not Used	136-155		

SKIPPED ITEMS FILE

Record Length: 69 characters
Storage Medium: Mass Storage
Processors Used: File

<u>NAME</u>	<u>POSITIONS</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
UICC	2-7	A6	Unit ID (C-record)
LINC	10-15	A6	LIN (C-record)
NSNNM	18-39	A22	LIN Name
IPROJ(7)	43-45	I3	Projected on hand
	47-49		quantity for each
	51-53		fiscal year
	55-57		
	59-61		
	63-65		
	67-69		

BASE CASE FILE

Record Length: 129 characters
Storage Medium: Mass Storage
Processors Used: Assessment

<u>NAME</u>	<u>POSITIONS</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
I	2-5	I4	Index # of Unit
CODE(I)	11-16	A6	Unit ID
QUAL(I)	21-22	A2	Unit Branch
TEXT(I)	27-50	A24	Unit Name

IRATGB	53,64,75,86, 97,108,119	I1	Rating Level for Each Year
NP(K)	55-56,66-67, 77-78,88-89, 99-100,110-111 121-122	I2	Number of Pacing Items in Each Year
NNP(K)	58-60,69-71, 80-82,91-93, 102-104,113-115, 124-126	I3	Number of Non-pacing Items in Each Year

WORKSHEET FILE

Record Length: 50
Storage Medium: Mass Storage
Processors Used: File

Please see Figure 8 for format.

NR	UIC	BR	UNIT NAME		FY82	FY83	FY84	FY85	FY86	FY87	FY88
1	UNT001	QH	CO PETROLEUM SUPP	BASE:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				TRIAL:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				ACHV:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				NEXT:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
2	UNT004	MD	MOB BN MEDICAL	BASE:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				TRIAL:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				ACHV:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				NEXT:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
3	UNT005	OD	DET TECHNICAL SUPPLY	BASE:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				TRIAL:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				ACHV:	C 1	C 1	C 1	C 1	C 1	C 1	C 1
				NEXT:	C 1	C 1	C 1	C 1	C 1	C 1	C 1

***** UNCLASSIFIED *****

Figure 8. Worksheet Sample Format

ITEM RATING FILE

Record Length: 155
 Storage Medium: Mass Storage
 Processors Used: Assessment

<u>NAME</u>	<u>POSITIONS</u>	<u>FORMAT</u>	<u>DESCRIPTION</u>
NFY	1-2	I2	Fiscal Year
POOLNR	4-7	I4	Original Unit Sequence #
UMACOM	9-14	A6	Major Command
UBR	16-17	A2	Unit Branch
UIC	19-24	A6	Unit ID
UICNM	26-46	A21	Unit Name
UDAMPL	48-52	I5	Unit Priority
USRC	54-62	A9	Unit SRC
UALO	64	I1	Unit ALO
UUPDATE	66-67	I2	Unit Effective Date
LIN	69-74	A6	Line Item Number
LINNM	76-97	A22	LIN Name
ERC	99	A1	Equipment Read. Code
PACR	101	A1	Pacing Indicator
ACFT	103	A1	Aircraft Indicator
IREQD	105-111	I7	Quantity Required
IAUTH	113-119	I7	Quantity Authorized
ICHG	121-127	I7	Quantity of Change
I PROJ	129-135	I7	Quantity Projected
RTGSYM	138	A1	Rating Symbol
LINRTG(1)	140	A1	LIN Rating ('BASE')
LINRTG(2)	142	A1	LIN Rating ('TRIAL' only)
SYMBOL	145	A1	Flag
QTYSGN	148	A1	'+' or '-'
ADJQTY	149-151	I3	Adjusted Quantity
RTGSGN	154	A1	Same as QTYSGN
ADJRTG	155	I1	Adjusted Rating

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SECTION 4. PROGRAM MAINTENANCE PROCEDURES

4.1 Conventions

A convention was followed to name all program and files within the system. All names are eight characters in length and are subdivided as follows:

- 1-2 Processor Name (TP, FP, AP)
- 3 Version Number (currently a '1')
- 4-6 Module name (PRG for program, etc.)
- 7 Classification (Ø - unclassified,
2 - confidential
4 - secret)
- 8 Fiscal Year (Ø - no fiscal year setting
1 through 7 - fiscal year index)

4.2 Verification Procedures

Not applicable.

4.3 Error Conditions

The potential errors that could occur while operating the system will be described in the User's Manual.

The limitations placed on the number of unit ID's in the Activated Unit List or SRC's in the CCT Data will cause error messages to be generated and processing to stop if the 'WRNPAS' run control parameter was set to 'NO'. This is applicable only to the Tape Processor and is explained in Section 2.4.25 (WRNMSG). Any other messages would originate from the Univac Operating System (EXEC) and should be handled accordingly.

4.4 Special Maintenance Procedures

- Executive Control Language (ECL)

The ECL associated with each of the eight runstreams used to run the three processors. See Figures 4-1 through 4-8.

- Edit, Compile and Mapping Procedures

The commands used to edit and compile the program unit symbolic code are shown in Figures 4-9(a) and 4-9(b) respectively. The procedure to map recompiled symbolics into absolute code is shown in Figure 4-9(c).

4.5 Special Maintenance Programs

- File Assignment Command

The command to assign all of the data files used by the three processors is:

```
@ADD,L MTOE*ECL-LIB.ASG-EDATE
```

The ECL invoked by this command is shown in Figure 4-10.

- File Deletion Command

The command to delete all of the data files used by the three processors is:

```
@ADD,L MTOE*ECL-LIB.DELETE-EDATE
```

The ECL invoked by this command is shown in Figure 4-11.

4.6 Listings

The program listings for each of the three processors including symbolics, absolutes and ECL, are resident in the LEA production library.

```

@RUN      TPIMLT,,,720
@ASG,A    TPIRUG1.
@BRKPT    PRINT$/TP1RUN01
@HDG,P    ***** TP1MLT - CONFIDENTIAL *****
@ASG,A    TP1PRG00.
@ASG,A    TP1CTL01.
@ASG,A    TP1MSG00.
@ASG,A    TP1FYA00.
@ASG,A    MTOE*MTO03041.
@ASG,A    TP1SRC00.
@ASG,A    TP1NEW40
@ASG,A    TP1CCT40.
@ASG,A    TP1APF00.
@USE      2,TP1CTL01.
@USE      3,TP1MSG00
@USE      7,MTOE*MTO03041
@USE      8,TP1FYA00
@USE      9,TP1SRC00.
@USE      11,TP1NEW40
@USE      12,TP1CCT40
@USE      16,TP1APF00
@ERS      3.
@ERS      11.
@ERS      12.
@ERS      16.
@XQT      TP1PRG00.7D5-TP1
@FREE     TP1APF00.
@FREE     TP1MSG00.
@FREE     TP1RUN01.
@SYM,U    TP1APF00.,,S00303
@SYM,U    TP1MSG00.,,S00303
@SYM,U    TP1RUN01.,,S00303
@FIN

```

Figure 4-1. TP1MLT ECL Commands

```

@RUN          TP1NEW,,,720
@ASG,A        TP1RUN02.
@BRKPT        PRINT$/TP1RUN02
@HDG,P        ***** TP1NEW - CONFIDENTIAL *****
@ASG,A        TP1PRG00.
@ASG,A        TP1CTL02.
@ASG,A        TP1MSG00.
@ASG,A        TP1FYA00.
@ASG,A        MTOE*MTO03041.
@ASG,A        TP1SRC00.
@ASG,A        TP1NEW40
@ASG,A        TP1CCT40.
@ASG,A        TP1APF00
@USE          2,TP1CTL02.
@USE          3,TP1MSG00
@USE          7,MTOE*MTO03041
@USE          8,TP1FYA00
@USE          9,TP1SRC00.
@USE          11,TP1NEW40
@USE          12,TP1CCT40
@USE          16,TP1APF00
@ERS          3.
@ERS          11.
@ERS          12.
@ERS          16.
@XQT          TP1PRG00.705-TP1
@FREE         TP1APF00.
@FREE         TP1MSG00.
@FREE         TP1RUN01.
@SYM,U        TP1APF00.,,S00303
@SYM,U        TP1MSG00.,,S00303
@SYM,U        TP1RUN02.,,S00303
@FIN

```

Figure 4-2. TP1NEW ECL Commands

```

@RUN      TP1CCT,,,720
@ASG,A    TP1RUN03.
@BRKPT    PRINT$/TP1RUN03
@HDG,P    ***** TP1CCT - CONFIDENTIAL *****
@ASG,A    TP1PRG00.
@ASG,A    TP1CTL03.
@ASG,A    TP1MSG00.
@ASG,A    TP1FYA00.
@ASG,A    MTOE*MTO03041.
@ASG,A    TP1SRC00.
@ASG,A    TP1APF00.
@USE      2,TP1CTL03.
@USE      3,TP1MSG00
@USE      7,MTOE*MTO03041
@USE      8,TP1FYA00
@USE      9,TP1SRC00.
@USE      11,TP1NEW40
@USE      12,TP1CCT40
@USE      16,TP1APF00
@ERS      3.
@ERS      11.
@ERS      12.
@ERS      16.
@XQT      TP1PRG00.705-TP1
@FREE     TP1APF00.
@FREE     TP1MSG00.
@FREE     TP1RUN03.
@SYM,U    TP1APF00.,,S00303
@SYM,U    TP1MSG00.,,S00303
@SYM,U    TP1RUN03.,,S00303
@FIN

```

Figure 4-3. TP1CCT ECL Commands

```

@RUN      FP1NEW,,,72#
@ASG,A    FP1RUN#1.
@BRKPT    PRINT$/FP1RUN#1
@ASG,A    TP1NEW4#.
@USE      7,TP1NEW4#
@ASG,T    2.
@ASG,T    11.,F///15##
@ASG,T    12.,F///15##
@ASG,T    13.,F///15##
@ASG,T    14.,F///15##
@ASG,T    15.,F///15##
@ASG,T    16.,F///15##
@ASG,T    17.,F///15##
@ASG,T    21.,F///15##
@HDG,P    ***** FP1NEW - FY 1 - CONFIDENTIAL *****
@ASG,A    FP1PIK21.
@ASG,A    FP1SKP21.
@USE      1#,FP1SKP21
@USE      2#,FP1PIK21
@ERS      FP1PIK21.
@ERS      FP1SKP21.
@ERS      2.
@ERS      11.
@ERS      12.
@ERS      13.
@ERS      14.
@ERS      15.
@ERS      16.
@ERS      17.
@ED,R     FP1CTL#1.
@SPLIT    2. 1 5
@XQT      FP1PRG##.7#5-FP1
@HDG,P    ***** FP1NEW - FY 2 - CONFIDENTIAL *****
@ASG,A    FP1PIK22.
@ASG,A    FP1SKP22.
@USE      1#,FP1SKP22
@USE      2#,FP1PIK22
@ERS      FP1PIK22.
@ERS      FP1SKP22.
@ERS      2.
@ERS      11.
@ERS      12.
@ERS      13.
@ERS      14.
@ERS      15.
@ERS      16.
@ERS      17.

```

Figure 4-4. FP1NEW ECL Commands
(page 1 of 4 pages)

```

@ED,R      FP1CTL01.
SPLIT      2. 6 10
OMI
@XQT       FP1PRG00.705-FP1
@HDG,P      ***** FP1NEW - FY 3 - CONFIDENTIAL *****
@ASG,A      FP1PIK23.
@ASG,A      FP1SKP23.
@USE       10,FP1SKP23
@USE       20,FP1PIK23
@ERS       FP1PIK23.
@ERS       FP1SKP23.
@ERS       2.
@ERS       11.
@ERS       12.
@ERS       13.
@ERS       14.
@ERS       15.
@ERS       16.
@ERS       17.
@ED,R      FP1CTL01.
SPLIT      2. 11 15
OMI
@XQT       FP1PRG00.705-FP1
@HDG,P      ***** FP1NEW - FY 4 - CONFIDENTIAL *****
@ASG,A      FP1PIK24.
@ASG,A      FP1SKP24.
@USE       10,FP1SKP24
@USE       20,FP1PIK24
@ERS       FP1PIK24.
@ERS       FP1SKP24.
@ERS       2.
@ERS       11.
@ERS       12.
@ERS       13.
@ERS       14.
@ERS       15.
@ERS       16.
@ERS       17.
@ED,R      FP1CTL01.
SPLIT      2. 16 20
OMI
@XQT       FP1PRG00.705-FP1
@HDG,P      ***** FP1NEW - FY 5 - CONFIDENTIAL *****
@ASG,A      FP1PIK25.
@ASG,A      FP1SKP25.
@USE       10,FP1SKP25
@USE       20,FP1SKP25

```

Figure 4-4. FP1NEW ECL Commands
(page 2 of 4 pages)


```

@ERS      FP1PIK25.
@ERS      FP1SKP25.
@ERS      2.
@ERS      11.
@ERS      12.
@ERS      13.
@ERS      14.
@ERS      15.
@ERS      16.
@ERS      17.
@ED,R     FP1CTL01.
SPLIT     2. 21 25
OMI
@XQT      FP1PRGOO.705-FP1
@HDG,P    ***** FP1NEW - FY 6 - CONFIDENTIAL *****
@ASG,A    FP1PIK26.
@ASG,A    FP1SKP26.
@USE      10,FP1SKP26
@USE      20,FP1PIK26
@ERS      FP1PIK26.
@ERS      FP1SKP26.
@ERS      2.
@ERS      11.
@ERS      12.
@ERS      13.
@ERS      14.
@ERS      15.
@ERS      16.
@ERS      17.
@ED,R     FP1CTL01.
SPLIT     2. 26 30
OMI
@XQT      FP1PRG00.705-FP1
@HDG,P    ***** FP1NEW - FY 7 - CONFIDENTIAL *****
@ASG,A    FP1PIK27.
@ASG,A    FP1SKP27.
@USE      10,FP1SKP27
@USE      20,FP1PIK27
@ERS      FP1PIK27.
@ERS      FP1SKP27.
@ERS      2.
@ERS      11.
@ERS      12.
@ERS      13.
@ERS      14.
@ERS      15.

```

Figure 4-4. FP1NEW ECL Commands
(page 3 of 4 pages)

@ERS	16.
@ERS	17.
@ED,R	FP1CTLØ1.
SPLIT	2. 31 35
OMI	
@XQT	FP1PRGØØ.7Ø5-FP1
@FREE	FP1RUNØ1.
@SYM,U	FP1RUNØ1.
@FIN	

Figure 4-4. FP1NEW ECL Commands
(page 4 of 4 pages)

```

@RUN      FP1CCT,,,72#
@ASG,A    PF1RUN#2.
@BRKPT    PRINT$/FP1RUN#2
@HDG,P    ***** FP1CCT - CONFIDENTIAL *****
@ASG,A    TP1CCT4#.
@ASG,A    FP1PIK2#.
@ASG,A    FP1SKP2#.
@ASG,A    FP1CTL#2.
@ASG,T    2.
@ASG,T    11.,F///15##
@ASG,T    12.,F///15##
@ASG,T    13.,F///15##
@ASG,T    14.,F///15##
@ASG,T    15.,F///15##
@ASG,T    16.,F///15##
@ASG,T    17.,F///15##
@ASG,T    21.,F///15##
@USE      2,FP1CTL#2
@USE      7,TP1CCT4#
@USE      1#,FP1SKP2#
@USE      2#,FP1PIK2#
@ERS      FP1PIK2#.
@ERS      FP1SKP2#.
@XQT      FP1PRG##.7#5-FP1
@FREE     FP1RUN#2.
@SYM,U    FP1RUN#2.,,S##3#3
@FIN

```

Figure 4-5. FP1CCT ECL Commands

```

@RUN      AP 1NWB,,,720
@ASG,A    AP1RUN01.
@BRKPT    PRINT$/AP1RUN01
@ASG,A    2.
@HDG,P    ***** AP1NWB - FY 1 - CONFIDENTIAL *****
@ASG,A    AP 1IRB21.
@ASG,A    FP1PIK21.
@ASG,A    AP 1WOT21.
@ASG,A    AP1BAS21.
@USE      7,FP 1PIK21
@USE      8,AP1WOT21
@USE      10,AP 1IRB21
@USE      16,AP1BAS21
@ERS      2.
@ERS      AP1WOT21.
@ERS      AP 1TRB21.
@ERS      AP1BAS21.
@ED,R     AP 1CTL01.
SPLIT     2. 1 6
OMI
@XQT      AP1PRG00.705-AP1
@FREE     FP 1PIK21.
@FREE     AP1IRB21.
@FREE     AP 1WOT21.
@FREE     AP1BAS21.
@HDG,P    ***** AP1NWB - FY 2 - CONFIDENTIAL *****
@ASG,A    AP 1IRB22.
@ASG,A    FP1PIK22.
@ASG,A    AP 1WOT22.
@ASG,A    AP1BAS22.
@USE      7,FP 1PIK22
@USE      8,AP1WOT22
@USE      10,AP 1IR322
@USE      16,AP1BAS22
@ERS      2.
@ERS      AP1WOT22.
@ERS      AP 1IRB22.
@ERS      AP1BAS22.
@ED,R     AP 1CTL01.
SPLIT     2. 7 12
OMI
@XQT      AP1PRG00.705-AP1
@FREE     FP 1PIK22.
@FREE     AP1IRB22.
@FREE     AP 1WOT22.
@FREE     AP1BAS22.

```

Figure 4-6. AP1NWB ECL Commands
(page 1 of 4 pages)

```

***** AP1NWB - FY 3 - CONFIDENTIAL *****
@HDG,P
@ASG,A      AP1IRB23.
@ASG,A      FP1PIK23.
@ASG,A      AP1WOT23.
@ASG,A      AP1BAS23.
@USE       7,FP1PIK23
@USE       8,AP1WOT23
@USE      10,AP1IRB23
@USE      16,AP1BAS23
@ERS       2.
@ERS      AP1WOT23.
@ERS      AP1IRB23.
@ERS      AP1BAS23.
@ED,R      AP1CTL01.
SPLIT      2. 13 18
OMI
@XQT      AP1PRG00.705-AP1
@FREE      FP1PIK23.
@FREE      AP1IRB23.
@FREE      AP1WOT23.
@FREE      AP1BAS23.
***** AP1NWB - FY 4 - CONFIDENTIAL *****
@HDG,P
@ASG,A      AP1IRB24.
@ASG,A      FP1PIK24.
@ASG,A      AP1WOT24.
@ASG,A      AP1BAS24.
@USE       7,FP1PIK24
@USE       8,AP1WOT24
@USE      10,AP1IRB24
@USE      16,AP1BAS24
@ERS       2.
@ERS      AP1WOT24.
@ERS      AP1IRB24.
@ERS      AP1BAS24.
@ED,R      AP1CTL01.
SPLIT      2. 19 24
OMI
@XQT      AP1PRG00.705-AP1
@FREE      FP1PIK24.
@FREE      AP1IRB24.
@FREE      AP1WOT24.
@FREE      AP1BAS24.
***** AP1NWB - FY 5 - CONFIDENTIAL *****
@HDG,P
@ASG,A      AP1IRB25.
@ASG,A      FP1PIK25.
@ASG,A      AP1WOT25.
@ASG,A      AP1BAS25.

```

Figure 4-6. AP1NWB ECL Commands
(page 2 of 4 pages)

```

@USE      7,FP1PIK25
@USE      8,AP1WOT25
@USE      10,AP1IRB25
@USE      16,AP1BAS25
@ERS      2.
@ERS      AP1WOT25.
@ERS      AP1IRB25.
@ERS      AP1BAS25.
@ED,R     AP1CTL01.
SPLIT     2. 25 30
OMI
@XQT      AP1PRG00.705-AP1
@FREE     FP1PIK25.
@FREE     AP1IRB25.
@FREE     AP1WOT25.
@FREE     AP1BAS25.
@HDG,P    ***** AP1NWB - FY 6 - CONFIDENTIAL *****
@ASG,A    AP1IRB26.
@ASG,A    FP1PIK26.
@ASG,A    AP1WOT26.
@ASG,A    AP1BAS26.
@USE      7,FP1PIK26
@USE      8,AP1WOT26
@USE      10,AP1IRB26
@USE      16,AP1BAS26
@ERS      2.
@ERS      AP1WOT26.
@ERS      AP1IRB26.
@ERS      AP1BAS26.
@ED,R     AP1CTL01.
SPLIT     2. 31 36
OMI
@XQT      AP1PRG00.705-AP1
@FREE     FP1PIK26.
@FREE     AP1IRB26.
@FREE     AP1WOT26.
@FREE     AP1BAS26.
@HDG,P    ***** AP1NWB - FY 7 - CONFIDENTIAL *****
@ASG,A    AP1IRB27.
@ASG,A    FP1PIK27.
@ASG,A    AP1WOT27.
@ASG,A    AP1BAS27.
@USE      7,FP1PIK27
@USE      8,AP1WOT27
@USE      10,AP1IRB27
@USE      16,AP1BAS27
@ERS      2.

```

Figure 4-6. AP1NWB ECL Commands
(page 3 of 4 pages)

CAA-D-83-3

@ERS	AP1WOT27.
@ERS	AP1IRB27.
@ERS	AP1BAS27.
@ED,R	AP1CTL01.
SPLIT	2. 37 42
OMI	
@XQT	AP1PRG00.705-AP1
@FREE	FP1PIK27.
@FREE	AP1IRB27.
@FREE	AP1WOT27.
@FREE	AP1BAS27.
@FREE	AP1RUN01.
@SYM,U	AP1RUN01.,,S00303
@FIN	

Figure 4-6. AP1NWB ECL Commands
(page 4 of 4 pages)

```

@RUN      AP1CTB,,,720
@ASG,A    AP1RUN03.
@BRKPT    PRINT$/AP1RUN03
@HDG,P    ***** AP1CTB - CONFIDENTIAL *****
@ASG,A    AP1CTL03.
@ASG,A    AP1IRB20.
@ASG,A    FP1PIK20.
@USE      2,AP1CTL03
@USE      7,FP1PIK20
@USE      10,AP1IRB20
@ERS      AP1IRB20.
@XQT      AP1PRG00.705-AP1
@FREE     AP1RUN03.
@SYM,U    AP1RUN03.,,S00303
@FIN

```

Figure 4-7. AP1CTB ECL Commands


```

@RUN      AP1NWT,,,720
@ASG,A    AP1RUN02.
@BRKPT    PRINT$/AP1RUN02
@ASG,A    AP1PAS21.
@ASG,A    AP1PAS22.
@ASG,A    AP1PAS23.
@ASG,T    2.
@ASG,T    20.,F///100000
@ASG,T    21.,F///100000
@USE      11,AP1PAS21
@USE      12,AP1PAS22
@USE      13,AP1PAS23
@HDG,P    ***** AP1NWT - FY 1 - CONFIDENTIAL *****
@ASG,A    AP1WOT21.
@ASG,A    AP1WIN21.
@ASG,A    AP1IRB21.
@ASG,A    AP1IRT21.
@ASG,A    AP1BAS21.
@ERS      2.
@ERS      AP1WOT21.
@ERS      AP1PAS21.
@ERS      AP1PAS22.
@ERS      AP1PAS23.
@ERS      AP1IRT21.
@USE      8,AP1WOT21
@USE      9,AP1WIN21
@USE      10,AP1IRB21
@USE      15,AP1IRT21
@USE      16,AP1BAS21
@ED,R     AP1CTL02.
SPLIT     2. 1 17
OMI
@XQT      AP1PRG00.705-AP1
@FREE     AP1IRB21.
@FREE     AP1IRT21.
@FREE     AP1BAS21.
@FREE     AP1WOT21.
@FREE     AP1WIN21.
@HDG,P    ***** AP1NWT - FY 2 - CONFIDENTIAL *****
@ASG,A    AP1WOT22.
@ASG,A    AP1WIN22.
@ASG,A    AP1IRB22.
@ASG,A    AP1IRT22.
@ASG,A    AP1BAS22.
@ERS      2.
@ERS      AP1WOT22.

```

Figure 4-8. AP1NWT ECL Commands
(page 1 of 5 pages)

```

@ERS      AP1PAS21.
@ERS      AP1PAS22.
@ERS      AP1PAS23.
@ERS      AP1IRT22.
@USE      8,AP1WOT22
@USE      9,AP1WIN22
@USE      10,AP1IRB22
@USE      15,AP1IRT22
@USE      16,AP1BAS22
@ED,R     AP1CTL02.
SPLIT     2. 18 34
OMI
@XQT      AP1PRG00.705-AP1
@FREE     AP1IRB22.
@FREE     AP1IRT22.
@FREE     AP1BAS22.
@FREE     AP1WOT22.
@FREE     AP1WIN22.
@HDG,P    ***** AP1NWT - FY 3 - CONFIDENTIAL *****
@ASG,A    AP1WOT23.
@ASG,A    AP1WIN23.
@ASG,A    AP1IRB23.
@ASG,A    AP1IRT23.
@ASG,A    AP1BAS23.
@ERS      2.
@ERS      AP1WOT23.
@ERS      AP1PAS21.
@ERS      AP1PAS22.
@ERS      AP1PAS23.
@ERS      AP1IRT23.
@USE      8,AP1WOT23
@USE      9,AP1WIN23
@USE      10,AP1IRB23
@USE      15,AP1IRT23
@USE      16,AP1BAS23
@ED,R     AP1CTL02.
SPLIT     2. 35 51
OMI
@XQT      AP1PRG00.705-AP1
@FREE     AP1IRB23.
@FREE     AP1IRT23.
@FREE     AP1BAS23.
@FREE     AP1WOT23.
@FREE     AP1WIN23.
@HDG,P    ***** AP1NWT - FY 4 - CONFIDENTIAL *****
@ASG,A    AP1WOT24.
@ASG,A    AP1WIN24.

```

Figure 4-8. AP1NWT ECL Commands
(page 2 of 5 pages)

@ASG,A	AP1IRB24.
@ASG,A	AP1IRT24.
@ASG,A	AP1BAS24.
@ERS	2.
@ERS	AP1WOT24.
@ERS	AP1PAS21.
@ERS	AP1PAS22.
@ERS	AP1PAS23.
@ERS	AP1IRT24.
@USE	8,AP1WOT24
@USE	9,AP1WIN24
@USE	10,AP1IRB24
@USE	15,AP1IRT24
@USE	16,AP1BAS24
@ED,R	AP1CTL02.
SPLIT	2. 52 68
OMI	
@XQT	AP1PRG00.705-AP1
@FREE	AP1IRB24.
@FREE	AP1IRT24.
@FREE	AP1BAS24.
@FREE	AP1WOT24.
@FREE	AP1WIN24.
@HDG,P	***** AP1NWT - FY 5 - CONFIDENTIAL *****
@ASG,A	AP1WOT25.
@ASG,A	AP1WIN25.
@ASG,A	AP1IRB25.
@ASG,A	AP1IRT25.
@ASG,A	AP1BAS25.
@ERS	2.
@ERS	AP1WOT25.
@ERS	AP1PAS21.
@ERS	AP1PAS22.
@ERS	AP1PAS23.
@ERS	AP1IRT25.
@USE	8,AP1WOT25
@USE	9,AP1WIN25
@USE	10,AP1IRB25
@USE	15,AP1IRT25
@USE	16,AP1BAS25
@ED,R	AP1CTL02.
SPLIT	2. 69 85
OMI	
@XQT	AP1PRG00.705-AP1
@FREE	AP1IRB25.
@FREE	AP1IRT25.
@FREE	AP1BAS25.

Figure 4-8. AP1NWT ECL Commands
(page 3 of 5 pages)

```

@FREE      AP1WOT25.
@FREE      AP1WIN25.
@HDG,P          ***** AP1NWT - FY 6 - CONFIDENTIAL *****
@ASG,A        AP1WOT26.
@ASG,A        AP1WIN26.
@ASG,A        AP1IRB26.
@ASG,A        AP1IRT26.
@ASG,A        AP1BAS26.
@ERS          2.
@ERS          AP1WOT26.
@ERS          AP1PAS21.
@ERS          AP1PAS22.
@ERS          AP1PAS23.
@ERS          AP1IRT26.
@USE          8,AP1WOT26
@USE          9,AP1WIN26
@USE          10,AP1IRB26
@USE          15,AP1IRT26
@USE          16,AP1BAS26
@ED,R        AP1CTL02.
SPLIT        2. 86 102
CMI
@XQT          AP1PRG00.705-AP1
@FREE        AP1IRB26.
@FREE        AP1IRT26.
@FREE        AP1BAS26.
@FREE        AP1WOT26.
@FREE        AP1WIN26.
@HDG,P          ***** AP1NWT - FY 7 - CONFIDENTIAL *****
@ASG,A        AP1WOT27.
@ASG,A        AP1WIN27.
@ASG,A        AP1IRB27.
@ASG,A        AP1IRT27.
@ASG,A        AP1BAS27.
@ERS          2.
@ERS          AP1WOT27.
@ERS          AP1PAS21.
@ERS          AP1PAS22.
@ERS          AP1PAS23.
@ERS          AP1IRT27.
@USE          8,AP1WOT27
@USE          9,AP1WIN27
@USE          10,AP1IRB27
@USE          15,AP1IRT27
@USE          16,AP1BAS27
@ED,R        AP1CTL02.
SPLIT        2. 103 119

```

Figure 4-8. AP1NWT ECL Commands
(page 4 of 5 pages)

CAA-D-83-3

OMI	AP1PRG00.705-AP1
@XQT	AP 1IRB27.
@FREE	AP1IRT27.
@FREE	AP 1BAS27.
@FREE	AP1WOT27.
@FREE	AP 1WIN27.
@FREE	AP1RUN02.
@SYM,U	AP 1RUN02.
@FIN	

Figure 4-8. AP1NWT ECL Commands
(page 5 of 5 pages)

```

@ED,U <FILE>.<ELEMENT>
(MAKE CHANGES)
EXIT

```

Figure 4-9(a). Editing Procedure

```

@FTN, OF <FILE>.<ELEMENT>
@ (TO PROMPT COMPILER)

```

Figure 4-9(b). Compilation Procedure

```

TAPE PROCESSOR
@PREP TP1PRG$.
@MAP,EN ,TP1PRG$.755-TP1/TAPE
IN TP1PRG$.MAIN
LIB TP1PRG$.
END

```

. NOTE E-OPTION

```

FILE PROCESSOR
@PREP FP1PRG$.
@MAP, N ,FP1PRG$.755-FP1
IN FP1PRG$.MAIN
LIB FP1PRG$.
END

```

```

ASSESSMENT PROCESSOR
@PREP AP1PRG$.
@MAP,EN ,AP1PRG$.755-AP1
IN AP1PRG$.MAIN
LIB AP1PRG$.
END

```

. NOTE E-OPTION

Figure 4-9(c). Mapping Procedure

```

@ASG,UP MTOE*TP1RUN#1.,F///1#
@ASG,UP MTOE*TP1RUN#2.,F///1#
@ASG,UP MTOE*TP1RUN#3.,F///1#
@ASG,UP MTOE*TP1CTL#1.,F///1#
@ASG,UP MTOE*TP1CTL#2.,F///1#
@ASG,UP MTOE*TP1CTL#3.,F///1#
@ASG,UP MTOE*TP1FYA##.,F///1#
@ASG,UP MTOE*TP1SRC##.,F///1###
@ASG,UP MTOE*TP1NEW4#.,F///1###
@ASG,UP MTOE*TP1CCT4#.,F///1###
@ASG,UP MTOE*TP1MSG##.,F///1#
@ASG,UP MTOE*TP1APP##.,F///1#
@MSG,N
@ASG,UP MTOE*FP1RUN#1.,F///1#
@ASG,UP MTOE*FP1RUN#2.,F///1#
@ASG,UP MTOE*FP1CTL#1.,F///1#
@ASG,UP MTOE*FP1CTL#2.,F///1#
@ASG,UP MTOE*FP1PIK2#.,F///1###
@ASG,UP MTOE*FP1PIK21.,F///1###
@ASG,UP MTOE*FP1PIK22.,F///1###
@ASG,UP MTOE*FP1PIK23.,F///1###
@ASG,UP MTOE*FP1PIK24.,F///1###
@ASG,UP MTOE*FP1PIK25.,F///1###
@ASG,UP MTOE*FP1PIK26.,F///1###
@ASG,UP MTOE*FP1PIK27.,F///1###
@ASG,UP MTOE*FP1SKP2#.,F///1#
@ASG,UP MTOE*FP1SKP21.,F///1#
@ASG,UP MTOE*FP1SKP22.,F///1#
@ASG,UP MTOE*FP1SKP23.,F///1#
@ASG,UP MTOE*FP1SKP24.,F///1#
@ASG,UP MTOE*FP1SKP25.,F///1#
@ASG,UP MTOE*FP1SKP26.,F///1#
@ASG,UP MTOE*FP1SKP27.,F///1#
@MSG,N
@ASG,UP MTOE*AP1RUN#1.,F///1#
@ASG,UP MTOE*AP1RUN#2.,F///1#
@ASG,UP MTOE*AP1RUN#3.,F///1#
@ASG,UP MTOE*AP1CTL#1.,F///1#
@ASG,UP MTOE*AP1CTL#2.,F///1#
@ASG,UP MTOE*AP1CTL#3.,F///1#
@ASG,UP MTOE*AP1IRB2#.,F///1###
@ASG,UP MTOE*AP1IRB21.,F///1###
@ASG,UP MTOE*AP1IRB22.,F///1###
@ASG,UP MTOE*AP1IRB23.,F///1###
@ASG,UP MTOE*AP1IRB24.,F///1###

```

Figure 4-15. File Assignment Command
(page 1 of 2 pages)

@ASG,UP MTOE*AP1IRB25.,F///10000
@ASG,UP MTOE*AP1IRB26.,F///10000
@ASG,UP MTOE*AP1IRB27.,F///10000
@ASG,UP MTOE*AP1IRT21.,F///10000
@ASG,UP MTOE*AP1IRT22.,F///10000
@ASG,UP MTOE*AP1IRT23.,F///10000
@ASG,UP MTOE*AP1IRT24.,F///10000
@ASG,UP MTOE*AP1IRT25.,F///10000
@ASG,UP MTOE*AP1IRT26.,F///10000
@ASG,UP MTOE*AP1IRT27.,F///10000
@ASG,UP MTOE*AP1PAS21.,F///10000
@ASG,UP MTOE*AP1PAS22.,F///10000
@ASG,UP MTOE*AP1PAS23.,F///10000
@ASG,UP MTOE*AP1BAS21.,F///100
@ASG,UP MTOE*AP1BAS22.,F///100
@ASG,UP MTOE*AP1BAS23.,F///100
@ASG,UP MTOE*AP1BAS24.,F///100
@ASG,UP MTOE*AP1BAS25.,F///100
@ASG,UP MTOE*AP1BAS26.,F///100
@ASG,UP MTOE*AP1BAS27.,F///100
@ASG,UP MTOE*AP1WIN21.,F///100
@ASG,UP MTOE*AP1WIN22.,F///100
@ASG,UP MTOE*AP1WIN23.,F///100
@ASG,UP MTOE*AP1WIN24.,F///100
@ASG,UP MTOE*AP1WIN25.,F///100
@ASG,UP MTOE*AP1WIN26.,F///100
@ASG,UP MTOE*AP1WIN27.,F///100
@ASG,UP MTOE*AP1WOT21.,F///100
@ASG,UP MTOE*AP1WOT22.,F///100
@ASG,UP MTOE*AP1WOT23.,F///100
@ASG,UP MTOE*AP1WOT24.,F///100
@ASG,UP MTOE*AP1WOT25.,F///100
@ASG,UP MTOE*AP1WOT26.,F///100
@ASG,UP MTOE*AP1WOT27.,F///100

Figure 4-15. File Assignment Command
(page 2 of 2 pages)


```

@DELETE MTOE*TP1RUN#1.
@DELETE MTOE*TP1RUN#2.
@DELETE MTOE*TP1RUN#3.
@DELETE MTOE*TP1CTL#1.,F///1#
@DELETE MTOE*TP1FYA#.,F///1#
@DELETE MTOE*TP1SRC#.,F///1####
@DELETE MTOE*TP1NEW4#.,F///1####
@DELETE MTOE*TP1CCT4#.,F///1####
@DELETE MTOE*TP1MSG#.,F///1#
@DELETE MTOE*TP1APF#.,F///1#
@MSG,N
@DELETE MTOE*FP1RUN#1.
@DELETE MTOE*FP1RUN#2.
@DELETE MTOE*FP1CTL#1.,F///1#
@DELETE MTOE*FP1CTL#2.,F///1#
@DELETE MTOE*FP1PIK2#.,F///1####
@DELETE MTOE*FP1PIK21.,F///1####
@DELETE MTOE*FP1PIK22.,F///1####
@DELETE MTOE*FP1PIK23.,F///1####
@DELETE MTOE*FP1PIK24.,F///1####
@DELETE MTOE*FP1PIK25.,F///1####
@DELETE MTOE*FP1PIK26.,F///1####
@DELETE MTOE*FP1PIK27.,F///1####
@DELETE MTOE*FP1SKP2#.,F///1#
@DELETE MTOE*FP1SKP21.,F///1#
@DELETE MTOE*FP1SKP22.,F///1#
@DELETE MTOE*FP1SKP23.,F///1#
@DELETE MTOE*FP1SKP24.,F///1#
@DELETE MTOE*FP1SKP25.,F///1#
@DELETE MTOE*FP1SKP26.,F///1#
@DELETE MTOE*FP1SKP27.,F///1#
@MSG,N
@DELETE MTOE*AP1RUN#1.
@DELETE MTOE*AP1RUN#2.
@DELETE MTOE*AP1RUN#3.
@DELETE MTOE*AP1CTL#1.,F///1#
@DELETE MTOE*AP1CTL#2.,F///1#
@DELETE MTOE*AP1CTL#3.,F///1#
@DELETE MTOE*AP1IRB2#.,F///1####
@DELETE MTOE*AP1IRB21.,F///1####
@DELETE MTOE*AP1IRB22.,F///1####
@DELETE MTOE*AP1IRB23.,F///1####
@DELETE MTOE*AP1IRB24.,F///1####
@DELETE MTOE*AP1IRB25.,F///1####
@DELETE MTOE*AP1IRB26.,F///1####

```

Figure 4-11. File Deletion Command
(page 1 of 2 pages)

@DELETE MTOE*AP1IRB27.,F///100000
@DELETE MTOE*AP1IRT21.,F///100000
@DELETE MTOE*AP1IRT22.,F///100000
@DELETE MTOE*AP1IRT23.,F///100000
@DELETE MTOE*AP1IRT24.,F///100000
@DELETE MTOE*AP1IRT25.,F///100000
@DELETE MTOE*AP1IRT26.,F///100000
@DELETE MTOE*AP1IRT27.,F///100000
@DELETE MTOE*AP1PAS21.,F///100000
@DELETE MTOE*AP1PAS22.,F///100000
@DELETE MTOE*AP1PAS23.,F///100000
@DELETE MTOE*AP1BAS21.,F///100
@DELETE MTOE*AP1BAS22.,F///100
@DELETE MTOE*AP1BAS23.,F///100
@DELETE MTOE*AP1BAS24.,F///100
@DELETE MTOE*AP1BAS25.,F///100
@DELETE MTOE*AP1BAS26.,F///100
@DELETE MTOE*AP1BAS27.,F///100
@DELETE MTOE*AP1WIN21.,F///100
@DELETE MTOE*AP1WIN22.,F///100
@DELETE MTOE*AP1WIN23.,F///100
@DELETE MTOE*AP1WIN24.,F///100
@DELETE MTOE*AP1WIN25.,F///100
@DELETE MTOE*AP1WIN26.,F///100
@DELETE MTOE*AP1WIN27.,F///100
@DELETE MTOE*AP1WOT21.,F///100
@DELETE MTOE*AP1WOT22.,F///100
@DELETE MTOE*AP1WOT23.,F///100
@DELETE MTOE*AP1WOT24.,F///100
@DELETE MTOE*AP1WOT25.,F///100
@DELETE MTOE*AP1WOT26.,F///100
@DELETE MTOE*AP1WOT27.,F///100

Figure 4-11. File Deletion Command
(page 2 of 2 pages)

FILM

2-8

DTI